

THE MEDICAL FORTNIGHTLY

Vol. XXIV

9798

ST. LOUIS, JANUARY 10, 1906.

No. 1

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LEADING ARTICLES

THE TREATMENT OF NEURASTHENIA.*

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IT is necessary in order that my views with regard to the therapeutics of neurasthenia should be clearly presented, to say a few words about its definition and nature. Recently some tendency has been shown to return to the views which prevailed before Beard, in 1880, impressed the profession and the community with the idea that neurasthenia or nervous exhaustion deserved separate recognition in our nosology. Dana, for instance, in a paper significantly entitled "The Passing of Neurasthenia," would relegate the majority of cases so diagnosticated to the psychoses, and of the cases left he believes that many should be regarded as illustrations of nervous disorder dependent upon the disease of non-nervous organs. I do not, however, accord with the view that all cases, or nearly all cases, come either under the psychiatric pale or are to be regarded as instances of

symptomatic neurasthenia. While neurasthenia is not as common an affection as many suppose, it is a distinct clinical entity whose cause is overfunctioning or undue expenditure of nervous energy, and whose manifestations are symptoms and signs which indicate nervous weakness and nervous irritability. It is true fatigue neurosis and the expression "irritable weakness," often used, is one fairly descriptive of its chief characteristics.

This reference to neurasthenia as a psychosis and a symptom of disease outside of the nervous system suggests a word or two at the outset about the treatment. While it is true that the insane may be neurasthenic or the neurasthenic become insane, the terms neurasthenia and psychosis are not interchangeable; nevertheless a psychic element which has its underlying cause in heredity is present in most cases of true neurasthenia. From first to last the body as well as the mind of the neurasthenic should be treated, suggestion and encouragement, which is continuing suggestion, being potent factors in the successful management of the disorder. Another fact which has some bearing upon the question of the existence of genuine, uncomplicated neurasthenia is that in symptomatic neurasthenia, unless the neurasthenic element is recognized in the therapeutic measures adopted, the treatment instituted with only the primary causal conditions in mind, will probably meet with little success. The proper method of treatment in symptomatic neurasthenia is one which takes into consideration both the neurasthenic and the underlying non-nervous disease. Whatever is done for heart, stomach, liver, kidneys or blood, the patient needs also mental and physical rest and the inspiration of well-directed suggestion.

A single illustrative case may be of value in this connection. A young married man came to me from a distance to be treated for neurasthenia. He had gradually become more and more nervous, irritable and depressed. He occupied an important commercial position, but not one sufficiently calling upon his energies to entirely account for his breakdown. He suffered from an annoying vitreous opacity and an old orchitic trouble; also from a congenital, partial arrest of development of one lower extremity. His mind had become concentrated on the symptoms and conditions which were not in themselves sufficient to cause any serious apprehensions. He

*Read before the Philadelphia Neurological Society, November 8, 1905.

had worried himself into a state of extreme neurasthenia because of affections easily cured, or at least relieved. The first thing necessary to do in this case as in so many others, was to remove the patient from his environment and to put him on as complete rest as possible, and to forcibly impress him with the idea that all his annoying symptoms were transient, or at least could be remedied, and that no reason existed why he should not in a short time be in as good health as he had been one or two years before. Proper attention was given to his eyes, to his somewhat crippled limb, to his genitalia, but at the same time he was placed upon a thorough rest treatment, at first nearly complete and later made partial. Isolation, massage, electricity, hydrotherapy and other measures, hereafter to be referred to, were used, and as they were gradually withdrawn, systematized exercises and increasing occupation were substituted. The man made a good recovery in less than three months.

Before taking up special measures for the treatment of neurasthenia, a few words should be said about its prophylaxis, and it would be time saving to include in these remarks suggestions regarding not only the methods of preventing its occurrence, but also of its recurrence after recovery through time or treatment. The age is strenuous. Notwithstanding the pace which is set in almost all walks of life, however, many succeed in passing to middle life and later, and then succumb not to neurasthenia, but to arteriosclerosis or some other degenerative disease. The predisposed neurasthenic who tends to early exhaustion of his nervous system may, in spite of his neuropathic heredity, have within him great possibilities in some directions, and it is well worth while to conserve and develop his powers. The physical and mental endowments and limitations of the child should receive the close attention of the parent and the educator. The seeds of neurasthenia may be sown in the preparatory school or in the college, and especially in the latter, where so often a false standard, or at least one that is not suited to the average members of a class, is set. After the general education or training of the youth is completed, another great step towards the prevention of neurasthenia is that which is taken when care is exercised, both by the individual and his advisers, in the choice of an occupation which is suited to his inherited endowments.

Passing now to the question of the prevention of neurasthenia in those engaged in active pursuits, it should be remarked that not a few of those who suffer from nervous or other breakdown do so because their lives and

work are full of unrest. Of two business men who have equal amounts of work to do, and are practically equal in physical strength and mental capacity, one goes about his tasks with a steadiness and system that do not wear either upon himself or those with whom he comes in contact; the other with such restlessness and unnecessary output as to keep himself in a half exhausted state and those around him disturbed and disquieted. Perhaps his unrest is shown in the unnecessary steps that he takes, or the unnecessary rapidity with which he takes them; in talking too long or too excitedly; in driving when leading would do better;—in brief, in expending more energy than is necessary even for the full accomplishment of the work in hand. The feelings of those compelled by fate to keep company with these useful but irritating mortals is best expressed by the slang expression, "Give us a rest;" but as a rule they neither rest themselves or let anyone about them rest. One man does his work with smoothness and with only that loss of vitality which is easily repaired by his daily food and sleep, the other is always giving out more than can thus be supplied. One saves his forces at the same time that he uses them, the other is wasting much that he might easily save. One physician is worn out before his hours of work are half expired; the other goes evenly and quietly through the hard day's work. The work that nags and harrasses one man scarcely ruffles the other.

Probably no one thing is more important in the prophylaxis and treatment of neurasthenia than the avoidance or prevention of worry. Genuine neurasthenia seldom occurs in one with a healthy inheritance, simply through persistent and severe mental work. The biographies of scholars, technologists, and professional men who have obtained celebrity afford ample evidence of the truth of this statement. On the other hand, it is a matter not only of history, but of common experience, that anxiety and worry, whether caused by domestic disturbances or embarrassments and perplexities in business and professional life, are fruitful sources of the exhaustion and irritability which are the sign manual of neurasthenia. Probably no one factor is more important in the production of the neurasthenic state than the worries of domestic life. *Res angustoe domi*. The student of mathematics, of law, of medicine, or of any vocation requiring intellectual capacity and persistent labor may continue his work through long hours for many weeks or months with no more visible result than normal mental and physical fatigue. But add to this an embarrassing or nagging domestic life, and neurasthenia is one of the most fre-

quent consequences. One's life should be so regulated, not only by himself, but with the assistance of those by whom he is constantly surrounded, that unnecessary anxiety and worry are as far as possible eliminated.

Passing now to a consideration of the treatment of neurasthenia, before taking up the different therapeutic methods and measures, attention must be directed to the fact that at least two sets of neurasthenic patients need to be recognized in considering plans of treatment. One set must be treated at home or not at all, because of financial or other reasons, and another, the patients included in which can be removed from home and their usual environment and undergo a comparatively expensive form of treatment. The methods to be employed in the two classes of cases are fundamentally the same, but differ in their manner of application and in the degree in which particular measures can be carried out. The general practitioner, is often confronted with the problem of what to do with a neurasthenic patient who cannot undergo an expensive rest treatment, and who indeed may be unable to secure the advantages even of a short journey or change of climate and surroundings.

Whether the patient is treated at his home or in a house or hospital where the so-called rest cure is undertaken, the most important measures of treatment will be the same. These are rest, regulated diet, recreation, change, massage, electricity, exercise, work and medicinal and special therapeutic measures. The keynote of the treatment in all cases is rest. As fatigue due to over-functioning is the most important element in the development of true neurasthenia, it is a necessary corollary that prevention of the over-expenditure of nervous energy demands first consideration as a therapeutic measure. The first thing that the physician should do is to look into the exact manner of life led by the patient, man or woman. This can often be so readjusted as to bring about a less wearing existence.

A word might be said here about under-rest, which is not quite the same as overwork. Even with time and opportunity at their disposal, many business and professional men, and in fact many in all walks of life, do not know how to rest even when they have time and opportunity. They worry and drive themselves even in their efforts at diversion and recreation; in all things they unnecessarily waste energy. They should be taught to do their tasks and duties with less mental and physical output; to sit when they would ordinarily stand, to talk quietly instead of with undue excitement, to substitute complacency for anxiety, and to work steadily without con-

sidering too much the time of completion of the task before them.

The mode of rest treatment pursued without taking patients from their homes is usually spoken of as the partial rest treatment. The method of carrying it out necessarily varies somewhat with the conditions in which the patient is placed. Some matters are of first importance. The hours of sleep should be largely increased. Many men and women who are in the habit of being in their beds only eight hours, or even less, can readily increase the time to twelve or fifteen hours without really interfering with their work. Fourteen to sixteen hours of recumbency out of the twenty-four should be taken whenever it is possible to accomplish this result. It is best brought about by going to bed at eight or nine in the evening, and by taking one or two hours during the day, preferably late in the morning or early in the afternoon.

All disturbing influences should be eliminated during the periods of day and of night rest. The woman should know nothing of household cares or of her children; nor should the man be troubled with anything either within or outside of his immediate household.

With regard to the use of food, electricity, bathing, diversions and medicine, the remarks which will be made later when discussing the full rest treatment are almost equally applicable in discussing the partial rest treatment either at home or elsewhere. Some modifications of the suggestions given when considering the full rest treatment as regards the administration of food and the use of exercise, diversions, etc., of course, will be necessary, but these are chiefly such as would be so apparent as to need no detailed consideration. It might be well, however, to say something with regard to massage used at the homes of patients. For business men and for women who are much engaged with domestic and other duties during the day, a good plan is to have the supper between six and seven, to spend the time between this meal and 8:30 or 9 o'clock in quiet conversation, reading or amusement, then to have general massage for forty-five minutes to an hour. This treatment may prove not only restful to the patient, but may add in the bringing on of sleep when insomnia is present. Careful arrangement should be made so that the patient will not be disturbed at the conclusion of the treatment. General faradization may sometimes be alternated with massage to the advantage of the patient, although on the whole it will prove less useful in the home treatment than massage and Swedish movements.

Milk and eggs should form the standby in bringing food to the maximum in the home as well as in the full rest treatment of neurasthenia.

Walking, horseback riding, golf and tennis playing are among the most useful outdoor exercises and diversions for neurasthenics, but when used the greatest care should be taken not to bring on undue fatigue. All modes of exercise should be used sparingly at first.

Automobiling is, in my experience, a nerve exhausting method of taking exercise and diversion. The reason for this is that those who resort to this method of transportation and exercise usually show little judgment in regard to speed and keep themselves over-exhilarated and in a state of nervous tension.

Let us next take up the subject of the complete rest treatment, a method of great value for a large percentage of cases of neurasthenia. I might be permitted to say here a few words about its indiscriminate use. The mistake is not infrequently made of putting patients upon this treatment without due consideration, and as a consequence it falls into unmerited disrepute. Many cases of melancholia, for instance, are not well adapted to this therapeutic measure; in other instances of this disease one or two weeks of the treatment is sufficient, other measures being introduced rapidly, including moderate exercise out of doors. A purely hysterical case is not always helped by the rest treatment. Symptomatic neurasthenia often does well under this treatment, which, as a rule however, must be modified somewhat according to the nature and peculiarities of the case.

The main features of the complete rest treatment are: (1) isolation, (2) rest in bed, (3) regulated diet, (4) massage and Swedish movements, (5) faradic electricity, (6) systematized respiratory exercises, (7) bathing, (8) diversion and recreation, (9) medicines.

Without isolation this treatment will frequently be complete failure. Again and again, because of the difficulties surrounding the removal of a patient from home, I have tried the experiment of isolating a patient in some portion of his or her own house; usually it is a flat failure. A woman who remains anywhere in a house in which she is accustomed to direct or attend to the wants or needs of others can never thoroughly relax mentally and physically for periods of days or weeks. She may promise to give up servants, visitors, friends, children and husband during the allotted period of treatment, but in spite of herself, in nine cases out of ten, will not be able to carry out her promise. It is far better to

attempt the partial rest treatment with an hour or two in bed during the day and ten or twelve from evening until morning, allowing the patient to be up and doing during the rest of the day, than to attempt the complete rest cure by what is supposed to be isolation in some part of the patient's own house. It is better, on the other hand, to have the treatment elsewhere than at home, even in those cases in which good judgment seems to dictate that the patient should be allowed occasionally to see some member of her family.

It may seem unnecessary to say that the rest should be in bed, but it happens sometimes that patients, as well as others, believe that rest in bed is necessary for only portion of the day, the recumbent position on a couch or sitting taking its place in part. For the first weeks of the treatment, at least, the rest should be in bed and as absolute as possible. Whether the patient is allowed to feed herself can only be decided by the peculiarities of the cases; in most instances she can, and the taking of food should be done in the half sitting position in bed, using a table. After several weeks, or a week or two, if the treatment is of short duration, the patient can be placed upon a couch for a portion of the day, and still later upon a couch and in a chair. This change should not be made until after a certain definite time is allotted for walking in the room. Even the position in bed is at times somewhat important; usually the head should not be too high and the patient should be encouraged to lie in different positions, that is, on the back or on either side and always with as complete muscular relaxation as possible.

One of the chief objects of the treatment is to rapidly or slowly improve the general nutrition of the patient by the skillful use of diet; I follow no fixed rule. Sometimes I begin with a complete milk diet, increasing in frequency and in amount, slowly or rapidly according to what seems to be the requirements of the individual case; cases, however, which do well on milk alone for more than a few days are not in my experience numerous. In some cases the diet may still be kept one largely of milk, adding only a few articles as raw or slightly boiled eggs, albumin water, Horlick's malted milk or some one of the forms of beef extract. In the majority of cases of neurasthenia the diet can soon be made mixed. In all cases, however, certain articles should be eschewed and others should be given particular favor. Much depends upon the manner in which food is prepared; broiled and roast meats are to be preferred. Oysters should be given raw, broiled or dry panned. Green veget-

ables such as lettuce, spinach and celery can be used with considerable freedom. It is not necessary to exclude potatoes altogether as is sometimes advised, but they should be used sparingly either roasted or mashed. Peas and rice thoroughly well cooked, may be used and fruits not too freely. The lighter forms of dessert like tapioca, corn starch, spanish cream, cream puffs and ice cream may be introduced after a time. The main object in the use of food is its increase to the point of full, or what would ordinarily be, over-feeding without disturbance of the digestion of the patient. I find raw eggs a valuable addition to the ordinary diet list. They may be taken in numbers varying from four to twelve a day according to the circumstances and to the amount of other food taken. Beef extract gives a variety to the diet, but does not add much to its real value.

Massage and Swedish movements cannot be dispensed with in the rest treatment. I can only give a few suggestions. As a rule, the massage can be given by the nurse who has charge of the patient; it is not always best that this should be done. The introduction of a masseuse from the outside may be either a useful measure or a disturbing element. Which it will be depends upon the patient sometimes, but more frequently on the masseuse. Massage at first should be given for a comparatively short time, thirty or thirty-five minutes, but later can be increased to forty, fifty or sixty minutes.

Electricity used only in the form of general faradization with a slowly interrupted current is less useful than massage, but often should be employed. Here again the method of its use is important. In not a few cases, the nurse who attempts to give faradic electricity to a patient is unskillful or irritating in her method of doing this. On the whole, I prefer the method of direct muscular faradization supplemented with gliding or labile currents applied to the entire limb or part. The nurse holding two moistened electrodes in one hand, passes from one muscle to another; then placing one electrode to the spine or in the neighborhood of the nerve plexus, the electrode is passed from point to point down the limb.

Generally I begin the use of systematized respiratory exercises early; sometimes after the second or third week and while the patient is still in bed. These are, in the first place, movements of the upper and lower limbs and of the trunk accompanied by deep breathing. Later when the time comes for the patient to be taken out of bed for a period of half an hour, five minutes of this time can be given up to systematized exercises. One mode of exercise which has proved useful in

my hands as a supplementary treatment to rest, massage and other measures, is slow respiratory exercises, either indoors or out of doors. For the indoor exercises I have for years made use of those given in a little book by Blaikie, entitled "Sound Bodies for Boys and Girls." It was intended originally for a school book, but the prescribed lessons correspond so well to what is required that they afford an easy method of ordering exercises. The physician or nurse can vary the exercises as seems best suited to the needs of the patient.

While bathing is useful in the home treatment of neurasthenia, it can be employed to greater advantage in the complete rest cure where time and attendants are at full command. A daily sponge bath, with or without the addition of alcohol, is perhaps the best all around hydropathic measure. Most neurasthenics will not stand cold sponge bathing, at least not at first, and those who, ill-advised or of their own initiation, resort suddenly to cold sponge bathing, or spraying or immersion in the hope of hardening and strengthening their nervous systems, may find that they have made a serious mistake. The cool or cold sponge, the spray, the douche and the immersion bath may prove beneficial to the neurasthenic, but usually a patient must be educated to them. With regard to the time of day when baths are taken, it is with sufferers of neurasthenia as it is with those in health, that the best time for one patient may not be that for another. Warm baths are usually best taken in the evening, tepid or cold baths in the morning, but there are many exceptions to these rules as to time.

In the daily schedule of a patient under the rest treatment diversion in the form of reading, conversation, games and light work like knitting are usually of use early or late in the course of treatment. Considerable judgment may be necessary in the selection of suitable books and suitable games, but no rules can be laid down to govern this matter. The judgment and good taste of both physician and nurse, combined with the experience soon gained with the patient, will serve to guide in this part of the treatment.

A few words might be said in conclusion, about seasonal vacations, resorts, climate and travel. These remarks are of course, applicable to patients convalescing under the influence of rest treatment or to others in whose cases it seems advisable to resort to change of climate and location rather than to indoor measures. Business and professional men and women whose manner of living calls for undue expenditure of nervous force, should have at least two periods of vacation during the year. One of these should be taken pre-

ferably at the usual time of such vacations, namely, between the first of June and the first of October. The number of weeks taken must, of course, be regulated by the circumstances and opportunities of the individual. Physicians and the community at large have come to recognize more and more the importance of the summer vacation, but the same is not true of the short vacation of late winter or early spring. It is a well-known fact that nervous disorders are more numerous and more severe in the early weeks of spring. If the busy man or woman could so arrange matters as to allow of a holiday of from two to three weeks late in February or early in March, in the most congenial climate accessible, it would be found that this would do almost as much in maintaining health and vigor as the usual longer summer vacation. Unfortunately February and March are usually a time of hard work and high tension, and yet much could be done to make a short vacation at this time popular if its value was fully recognized by members of the medical profession. The short vacation in late winter or early spring is usually best spent by going to some quiet and healthful resort in a climate less taxing than that in which the overweary man habitually dwells. For Americans north of the Maryland border, the springs of Virginia, or of North Carolina, the southern seaside resorts, the Bermudas, Nassau, Cuba or Jamaica will be found desirable. Continuous travel is not usually a good therapeutic measure for neurasthenia. In exceptional cases, however, a trip to the Mediterranean or to Japan or elsewhere may prove useful, but in all cases the journey should be made under conditions which do not tax. Much sight-seeing and hurrying from place to place should be avoided. Very high altitudes do not agree with neurasthenics, although they may do well at resorts not higher than one to three thousand feet.

I have said little about the use of medicines in the treatment of neurasthenia, and this is because there is comparatively little to say. Attention should always be directed to the digestive tract: stomachic tonics, digestants and mild cardiac or metallic tonics and even the antispasmodics have some place. Among the remedies of most value are preparations of strychnin with lactopeptin, nux vomica and gentian, cascarrilla, cactus, preferably in the form of the fluid extract, arsenous acid, sodium and gold chlorid, zinc valerinate, and in some cases preparations of iron like the albuminate or sulphate. Veronal and trional are among the most valuable hypnotics. Bromids should, as a rule, be avoided, but can be used in moderation in particular instances, especially when the pa-

tient's condition is one of general nervousness and great irritability. In the majority of cases alcoholic preparations should not be used. Next, perhaps, to the sufferers from migraine and from hypochondria, the neurasthenic man or woman is the most frequent victim of the advertising pharmacy of the day. He turns in every direction for the nostrums which will take away his feelings of fatigue, discomfort and depression, and too often resorts to such vicious stimulant narcotics as Vin Mariani and coco-cola, or to the too relieving sedative anodynes like antikamnia and cocain combinations. These stimulant tonics, these sedatives, anodynes and narcotics of alluring name are among the worst enemies of neurasthenics as they are of other members of the community.

GONORRHEA AND SOME OF ITS RESULTS.*

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GENTLEMEN:—Before beginning our regular course I desire to present to you a few facts which I have taken some pains to collect, to show you from the start the importance of gonorrhea as a causative factor of many diseases not only in this branch, but all through your medical course and in your practice in after life.

Of course it is natural for every professor and lecturer to think that his own branch is one of the most important, I believe though if you will consider carefully the facts I have collected to show the far reaching effect of gonorrhea, you will be willing to admit that the time you devote to this subject will not be entirely misspent.

I also will touch briefly upon a few points as to the education of the public, and especially the young men in regard to the dangers and the methods of prophylaxis.

So common is gonorrhea and so mild are many of the cases, that not only the laity, but a large per cent of physicians and surgeons have developed an indifference that is almost criminal.

Neisser holds that gonorrhea with perhaps the exception of measles, is the most widespread of all diseases (1). Morrow asserts that it is even a more potent factor of depopulation than syphilis, and that a large per cent of involuntary childlessness is due to it.

*Opening lecture at the Atlanta School of Medicine.

He also thinks the extent to which gonorrhea prevails in private life is much greater than is generally supposed, and makes the startling statement that there is more infection among virtuous wives than in professional prostitutes. The truth of this statement becomes more reconcilable, when one considers how much larger is the number of virtuous wives than is the number of prostitutes, and that "powerful motives lead to their concealment." Unfortunately the mildness of many cases gives the patient a false sense of the gravity of his condition, if neglected, and his suffering is rarely sufficient punishment for his sin, until some complication follows, or he desires to marry, but cannot, because of the uncertainty with which he is harrassed, not only on account of the danger of infecting an innocent woman, but also as to his future health and potency. Many of these cases become utterly miserable neurostenics from the profound mental impression made by the disease affecting the sexual organs, for next to a man's love of life comes that of procreation, and his sexual instinct, which "is given to man for two reasons, to perpetuate the species and to rivet the tie between husband and wife by mutual endearment" (2). Is, then, his mental anguish unnatural?

This is only the history of a certain class; others are apparently cured and of their own accord, or upon the advice of a careless physician, who gives his consent after merely inquiring as to the general symptoms and the discharge, the patient then marries a pure woman "only to deposit in her lap—as a wedding gift from his first wife, the prostitute—the seeds of a foul disease which makes her innocent wifehood a source of pain and misery, and often renders motherhood impossible. The prostitute takes a poetic revenge, and by the disease she gives her paramour forever seals the fountain of nature and restrains her supplanter from acting beyond her own (the prostitute's) sphere, even though she be a thousand times legalized as a wife by church and court" (3).

Is it right to treat so serious a matter as a joke? Should not a young man early in his youth receive a certain amount of education upon such an important subject and one with such disastrous possibilities? Ought this part of the education of a son be left to the servants or his ignorant (and perhaps profligate) companions, who little realize the dangerous pitfalls even if they themselves have fallen therein?

A father cannot ease his conscience by thinking his son will not yield to the temptation or will come out unscathed. With the plain fact staring him in the face, that 80%

of men contract gonorrhea, the sophistry of such reasoning is evident. The time to educate is before the disease is contracted, for then if a competent and conscientious surgeon takes charge of him, his one-sided education will be completed, but think what a price to pay! Consider the moral degradation, the physical weakness and the mental changes that have been wrought as chains of iron to handicap his career and perhaps wreck his life. It is not claimed that education will create an Utopia, but fear of impending danger would certainly save many from the maelstrom of venereal diseases if they were only shown the dangers in time. This education in addition to warning as to the peril should also encourage and even urge the young man that continence is not incompatible with perfect health. The double code of moral laws, is to be condemned, whereby a man may sin without offending society, and yet the same sin means the woman's ruin. I do not advocate lowering the standard for women, but raising it for men.

Morrow says thousands of young women suffer moral and physical shipwreck from ignorance of the fact that loss of virtue often carries with it the loss of health. "The vast majority of men who carry disease and death into their families do so ignorantly" (4). Undoubtedly many disasters in married life and untold suffering could be averted if the patients were properly advised even after they have contracted the disease. Who is to blame in these cases? Most assuredly the physician, who is almost always insufficiently trained in the methods of determining whether or not a patient can marry with impunity. This should be a standing question in all examinations in surgery, not only in the medical colleges, but also in the state board examinations, and in this way compel the student and physician to be prepared upon this subject. I assert no question could be asked that would be more practical, nor one that will be of more value in preventing sterility, disease, suffering and death.

Gonorrhea is the most amenable of venereal diseases to individual prophylaxis, and yet one hesitates at first to advocate any method which might perhaps increase the evil by lessening the danger which undoubtedly is a great conservator of social purity. When, however, we consider that the social evil has existed through all ages, and that all attempts at suppression have failed, from the rigid laws of Maria Theresa at Vienna and the Popes at Rome (5), down to the present day, and have invariably increased the numbers of the clandestine prostitutes (who is always more dangerous), that control meas-

ures have been equally as inefficient as those directed toward suppression, that all history and knowledge of human nature have shown that prostitution cannot be suppressed, and as venereal diseases are the worst results, it follows then that efforts must be directed toward protection from these dangers, in behalf of the wife and the state as well as the sinner, if he insists upon exposing himself. Explain to him that there is always danger and urge continence, but also advise him as to prophylactic measures, in case he exposes himself, which, it is sad to relate, will be of frequent occurrence. If he will not reform we are justified in behalf of an innocent wife to protect her and their offspring.

The use of the condom greatly lessens the danger of gonorrhea but it may rupture during coitus. Good results also follow injections of 10% argyrol after urinating and thoroughly washing the penis. The region of the meatus should be smeared with the same solution to kill any gonococci outside, while if the injection is properly given and retained five minutes the germs in the anterior urethra are destroyed. There is, however, always the danger of syphilis and a chancre which must be impressed upon the patient.

Other important sociological problems are to be considered in attempting any method preventing venereal diseases; the regulation of sexes in industrial life; the low wages received by working women; the more rigorous attempts to control abortions; and efforts to segregate the prostitutes in certain sections of the cities and leave them there undisturbed in order to lessen the number of the more dangerous clandestines. I regret that it is not within the province of this lecture to enter into the details of these subjects.

To show further the necessity of devoting more time and attention to this widespread though insidious disease that stalks through every nation, causing untold suffering, and making invalids of strong men and women, let us consider briefly some of its various phases:

I. *The Monetary Loss.*—So enormous are the figures and so meager and unreliable are the statistics, that I will ask you to make a mental calculation for yourself and estimate about the average cost of an average patient for necessary expenses incident to the disease, and to that add the loss of time, the loss in business from physical weakness and mental worry, and the loss to the nation from lessened capacity for production. Eighty per cent is the usual estimate of the men who have gonorrhea (6). According to the U. S. census 1900, there are about 20,000,000 men in these United States be-

tween 20 and 50 years of age. Eighty per cent of this number is 16,000,000. Now multiply this by the average loss of each patient to himself and the state, and the quotient will show part of the monetary loss from gonorrhea alone.

2. *Invalidism and Operations in Women.*—It is under this head that we see the appalling results of gonorrhea. Humiston and Price claim from 90 to 95 per cent of abdominal operations performed in the world today, are required on account of infections, adhesions and pus collections due to gonorrhea (7). These are higher than the percentages given by other authorities, but even the lowest is enough to stir the most indolent to activity.

In addition to the operations, equally frequent are those patients who are made invalids for life. Worse than these, however, are the cases who become mentally unbalanced on account of the removal of their sexual organs which were so damaged by the inflammatory process that the gynecologist found them useless or dangerous. A large number of these cases are due to latent gonococci from apparently cured husbands.

3. *Sexual Neurasthenia*, so frequently caused by gonorrhea, is one of the most intractable conditions with which they have to contend, and undoubtedly makes the patient more unhappy than any other non-fatal disease. From the number of cases with which I have come in contact, who have explained how depressed they were, and that on a number of occasions they had contemplated suicide, I feel justified in saying that this condition next to financial embarrassment and love affairs is the main cause of self-destruction. I am equally positive that a certain per cent of these cases become insane. It is also without doubt a frequent cause of divorce.

4. *Sterility.*—Through its effect on the epididymes and prostate gland it plays the main role in causing sterility and impotence in men. Benzler (8) followed the history of 474 soldiers with gonorrhea and found sterility resulted in 10% of the cases of urethral involvement; 23% where there was unilateral epididymitis and 41% where the epididymitis was double. Impotence is one of the disastrous results of damage to the prostatic urethra by the inflammation. It may be complete or partial, as imperfect erection, premature ejaculation, or loss of normal sensation apparently due to the destruction of the nerve endings in this part of the urethral canal (9).

According to Neisser, 50% of all involuntary childless marriages are due to gonorrhea. Cervical catarrh prevents the entrance of the spermatozoa, thereby rendering the woman sterile. After the inflammatory process has reached the endometrium and tubes, still further obstruction prevents the fertilization of the ovum even when the disease has not progressed to pus formation.

Bland-Sutton says gonorrhea is the chief cause of sterility of the prostitute class (7). Morrow has shown that women having it frequently can only give birth to one child, and subsequent trouble is likely to date from this event which furnishes ideal conditions for the growth and spread of the gonococci.

Some of the worst results of gonorrhea are not due so much to gonococci, which as a rule limit themselves to the mucous membranes, but to the secondary infections that are afforded extremely favorable conditions for their growth.

DeWarker (10) gives the first place to gonorrhea in the three diseases (gonorrhea, tuberculosis and syphilis) that press urgently for solution. He gives it the first place, not because it is more destructive to life than tuberculosis, but on account of its greater dangers to society, in its power to impair fertility and to permanently infringe upon usefulness.

5. *General Gonococcal Infections* have also been reported very frequently in recent years, and Winn (11) states that the lesions and symptoms depend upon three factors:

(1) Direct infection with the gonococcus itself; (2) absorption of a toxin (gonotoxin), and (3) mixed infection with other germs. Krause (12) demonstrated gonococci in the blood during life, and Ullmann has reported five cases of fatal gonorrheal pyemia, in four of which a necropsy showed the point of origin to be a prostatic abscess. Gonorrheal infection has no special clinical features which can differentiate it from other pyemias, and a positive diagnosis can only be made by a bacteriological examination of the blood or from an accessible lesion. Krause calls attention to the ease with which gonococci may be overlooked, which only grow to small colonies in blood, and in cultivating them the agar must not be heated above 41 deg. C.

6. *Blindness*.—Formerly about 50% of all blindness was due to gonorrhea, but since the adoption of Crede's prophylactic measures this has been reduced to about 20%. Even with this reduction it may still be given as evidence against gonococci, and to further strengthen the case against their attack on the innocent helpless children Holt has recently shown that gonococcal infections

and vaginitis are exceedingly frequent in institutions for children, highly contagious and difficult to control. He says where this infection is known it is justly regarded as the *bete noire* of institutions for children, the importance of which has only just begun to be appreciated. Twenty-six cases of gonococcal arthritis are reported, and it is claimed that a pyemic arthritis in a young infant is much more frequently due to the gonococcus than to the streptococcus or any other pyogenic organism.

7. *The Need for Reporting These Diseases*.—All efforts to study venereal diseases are hampered by the absolute lack of any reliable statistics in this country, and the attempt to have them reported purely for statistical purposes, without the names of the individuals, is most heartily approved. "While venereal diseases cause more deaths and deplete the population by causing abortion and preventing conception more than any other known disease or condition, this subject is largely ignored by sanitary bureaus in their registration of contagious diseases" (7). It is only in this way that the laity, physicians, and especially philanthropists, are to be shown the necessity of taking steps to check the ravages of these diseases which, although sapping the vitality and life blood of the nation, continue to be ignored. No city in this country has adequate hospital accommodations for the venereal patients. There is no more crying need today than for efficient treatment and medicine for all poor patients before the disease has tightened its relentless hold, and they are doomed, for life, to be sterile, impotent, or invalids.

In conclusion, gentlemen, I hope the facts I have reviewed will enable you to appreciate more fully the importance of gonorrhea, its widespread and far reaching effect, and trust none of you will admit it a disease to be feared no "worse than a cold in the head," and will combat any such criminal ideas on all occasions.

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If an incised wound in the soft parts does not heal as readily as it should, examine the urine for sugar.

THE MEDICAL FORTNIGHTLY

Issued Tenth and Twenty-Fifth of Every Month.

Under the Editorial Direction of

FRANK PARSONS NORBURY,
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EDITORIAL

In entering a new year the FORTNIGHTLY follows what has become a custom, in wishing all our friends "A Happy New Year;" custom though it be it is no less heart-felt and sincere. We would have

A Happy New Year.

each of you in the new year experience an excess of prosperity and true happiness beyond that of any of the years past.

THE FORTNIGHTLY looks to 1906 to be one of advances in its worth and usefulness. We look back on our work during the past year with a pardonable degree of pride, and at the same time with a thorough appreciation of the fact that our large audience has at all times encouraged us and proven an incentive to endeavor. The managing editors also feel that they will be expressing the sentiments of our readers in expressing their appreciation of the work done by the Fortnightly Department Staff, the increasing excellence of our departments is bringing us flattering commendation, and for this our thanks are due the men who are so ably doing this work.

The outlook for 1906 is indeed flattering, there promises to be a very material increase in the amount of department work presented, and our original department will be materially increased by the papers presented before the Medical Society of City Hospital Alumni, the FORTNIGHTLY having been selected by this prosperous society to publish its proceedings. It is our belief that our readers will see improvement in all departments and a gratifying increase in the amount of matter furnished, for it is our purpose to make the FORTNIGHTLY for 1906 the best yet.

If possible, always tie each component of a kidney pedicle separately, not en masse.

THE ST. LOUIS MEDICAL SOCIETY held its annual meeting on the evening of December 30th, the interest in the election brought out the largest attendance in the history of the society, 235 members being present.

The Annual Meeting of the St. Louis Medical Society.

The reports of the officers and committees for the year showed that 1905 has been in several respects the best year of the society's history. Thirty-nine meetings were held with an average attendance of 49.7. Fifty-one essays and addresses were delivered and a large number of anatomic and pathologic specimens were demonstrated, and various other matters were considered within the scope of the scientific work of the society, all of which marks the work for the year as of exceptional excellence. Sixty-four physicians were elected to associate membership during the year, and a number of lapsed memberships were revived, bringing the total active membership to 461 at the close of the year. The society lost seven members by death during the year, Drs. Wm. Johnston, W. M. McPheeters, R. M. King, C. V. F. Ludwig, J. J. Curl, A. Schlosstein and Will Rinninger.

The new building under way, the foundation having already been laid. The work will be pushed from this on, and it is expected that the society will be meeting in its own hall before the summer recess.

The election of officers for 1906 resulted as follows:

President—Dr. Geo. Homan.

Vice-President—Dr. Robert Barclay.

Recording Secretary—Dr. Hart Goodloe.

Corresponding Secretary—Dr. E. A. Babler.

Treasurer—Dr. C. J. Orr.

ADVANCE reports from the St. Louis Health Department indicate that 1905 has been a prosperous year in health matters as well as in growth and financial affairs; to have better than 1000 less deaths than in 1904, and that with a greatly increased

Local Birth and Mortality Statistics for 1905.

population is indeed "prosperity." There were 10,325 deaths during 1905. These figures are not official, as the number for the last two days of the year was estimated by the mortuary clerk. During the year 1904 there were 11,506 deaths recorded. The number of births reported up to the time for closing the office, December 30th, was 12,168, by months as follows: January, 907; February,

961; March, 997; April, 976; May, 948; June, 933; July, 973; August, 1145; September, 1031; October, 1092, November, 1032; December, to date, 1137.

The following diseases claimed the greatest number of victims during 1905: smallpox, 59; diphtheria, 110; typhoid fever, 127; pneumonia, 969; phthisis, 1250; heart disease, 907; suicide, 179; homicide, 77; accidents, 434. During 1904 there were 227 suicides, 105 homicides and 525 accidental fatalities.

The report prepared by the mortuary clerk for the week ending at noon on December 30th shows a total of 317 births, the largest number for one week during the year.

THE St. Louis Society for the Prevention of Tuberculosis in its recently issued annual report shows that the interest in this very important work is growing in a satisfactory manner, though the people of St. Louis have as yet to reach that degree of

Report of the Society for the Prevention of Tuberculosis.

appreciation of the worth of preventive measures which has resulted in the large decrease in the death rate from tuberculosis in New York, Philadelphia and Cleveland. The following is a brief summary of the work done by the society during the past year:

The preparation and successful adoption by the city of an ordinance giving St. Louis its first legislation for the control of the disease. Nothing in this law can offend physician, patient or family. Properly enforced, its operation will be beneficial in the highest degree.

There were prepared, printed and distributed, under many forms and in many ways, about 250,000 leaflets, brochures, cards, etc., instructing the public about the disease, its treatment and prevention. Special attention was given to warnings about careless spitting. The posting of special cards in most of the street cars was found the best way to call the public mind to this tremendous evil.

Lectures in various parts of the city were given during the year under the auspices of the society and the league. At the solicitation of the society and the league, the public press assisted the work by much publication of relevant matter.

Its purposes for the future are:

1. The rational and actual enforcement of the antispitting ordinance.
2. The proper and effective compliance with the recent law for controlling the disease.
3. More intelligent methods for cleaning streets and sidewalks.

4. More suitable provision for the care of poor consumptives by the city, such as:

Special hospital accommodations in present institutions for bedridden cases. A "rest cure" hospital for the non-bedridden cases during prostrating attacks of the disease.

An "open-air" hospital for treatment of all cases where a cure is possible.

Adequate public dispensary facilities, with definite hours for treatment and advice.

5. The freedom of the public health service from partisan political influences in order that the best men may render the best service.

In accomplishing this it is working with the Civic Improvement League. Every physician in our city should unite himself with one or both of these organizations. The Society for the Prevention of Tuberculosis elected to office the following gentlemen for 1906:

Francis G. Eaton, chairman; Dr. William Porter, vice-chairman; Jordan W. Lambert, treasurer; G. R. Blickhahn, secretary; Ashley Cabell, Dr. J. R. Lemen and Dr. Albert Merrell

DR. J. F. JENKINS, Tecumseh, Mich., (Jour. A.M.A., December 23) insists on the recumbent position from the beginning in typhoid fever. He states that milk preferably given

Typhoid Fever. with pepsin and hydrochloric acid and two soft-boiled eggs every twenty-four hours, occasionally alternating with barley or rice water for a change, makes a very efficient diet during the whole course of the fever. In the later stages a little old whiskey, as a stimulant to a flagging pulse may be added to the milk. In the early stages, fractional doses of calomel, followed by a small dose of Rochelle salts or sodium phosphate are indicated; in some cases they may be repeated from time to time during the first and second weeks. Intestinal antispetics are of value, he states, in checking putrefaction and relieving diarrhea and tympanitis, and, therefore, should be prescribed. When the temperature rises to 102.5, cold sponging or tubbing should be resorted to, and it is advisable to follow up the bath by vigorous frictions. Frequently a small amount of stimulant is indicated after the bath. When there is delirium or coma the ice bag to the head will relieve and often induce a natural sleep. During convalescence a tepid sponge bath of alcohol and water, equal parts, he thinks, has a beneficial effect. One should insist on the patient taking from a quart to a quart and a half of boiled water every twenty-four hours as the typhoid patient does not usually demand

water, even when the temperature is high. Diarrhea, when excessive is often checked by reduction or change of diet and full doses of bismuth subnitrate will usually be effective. For restlessness in the late stages Jenkins has found Hoffman's anodyne a very useful remedy. In the later stage stimulants are required for supporting the feeble heart action and during convalescence he advises hexamethylenamin in 5 gr. doses, three times a day, to destroy the bacilli in the urine.

DR. CHARLES E. PAGE enters a strong protest against what he terms the non-curative,

The Curative Treatment of Pneumonia, with Points on Hydrotherapy and Therapeutic Fasting in Fevers.

not to say killing, treatment of pneumonia, which is the prevailing one and includes drugs and forced feeding plus the mischievous effects of hot poultices on hot lungs. The essential features of his own plan (Med. Record, Dec 23) consist in the

use of cool applications to the chest and abstinence from practically all nourishment except water. In this way the disease when taken early is frequently aborted, and the normal death rate becomes five per cent for private and hospital cases combined, while in private practice alone it is about two per cent. For pneumonia the procedure recommended is as follows: large towel, coarse linen or cotton, is folded lengthwise in the middle then folded crosswise in the middle, and one-half the length of this four-ply towel is wrung tightly from ice-water, or the coldest water obtainable, and again folded crosswise, so as to give four thicknesses of damp towel next the skin, and the same, dry, outside. The damp folds should be freshened as often as they become at all hot, whether this be in ten, twenty, or thirty minutes. At first, in severe cases, the changes will be as often as every eight or ten minutes, the intervals lengthening more and more as the inflammation subsides, and breathing consequently becomes deeper and easier. When the patient is able to breathe naturally, and the compress no longer becomes hot, and before it is felt to be an uncomfortable treatment, this local cooling should cease. In some cases hot applications are also made to the legs. The author emphasizes the untoward results attending the employment of forced feeding, and points out the great advantages of keeping the patient on a diet of warm water until convalescence is established. The mortality from typhoid fever has shown no improvement dur-

ing the past seventy-eight years according to the records of the Massachusetts General Hospital, and the author attributes the bad results largely to the over-feeding practised.

In performing subcutaneous infusion do not allow too much fluid to accumulate at one area, otherwise necrosis may occur. Shift the needle to various parts not by swinging it from side to side, but by partly withdrawing it and reinserting it to another area.

THE NICHOLAS SENN CLUB.—The professional friends of Dr. Nicholas Senn have organized a Nicholas Senn Club of which Dr. Fernand Henrotin has been elected president and Dr. Arthur MacNeal secretary. Some time ago Dr. Byron Robinson suggested that the most appropriate testimonial to Dr. Senn in commemoration of his services to the medical profession would be a "Festschrift" after the custom of the German profession in honoring their great men. The club is the result of this suggestion. The publication of the "Festschrift" will be the first work undertaken by the organization. Dr. Robinson's idea is to collect in this testimonial volume one article from each country where scientific medicine is taught, and to publish them each in the native tongue of the writer. The general object of the club is to surround Dr. Senn with a small coterie of personal friends, whose duty and pleasure it shall be to assist him in carrying out any work which he may from time to time initiate.—Med. Standard.

TONSILLITIS.—R. M. Niles, in discussing the treatment of this affection, says that the patient should be isolated, should receive broken doses of calomel, followed by a saline laxative or croton oil, quinine in tonic doses. Strychnine, aconitine, sodium salicylate, guaiac and anodynes may also be required. Hot alkaline gargles and a spray of hydrogen peroxide are useful. Chlorate of potassium has little value. Often the application of the tincture or vinegar of capsicum produces the most brilliant results. Congestion and edema are reduced, the separation of sloughs is facilitated, granulations are stimulated, vasomotor inertia is overcome, and normal tissue metabolism is re-established. Tincture of capsicum, full strength or diluted with cod-liver oil should be applied to the Schneiderian mucous membranes in the treatment of the rhinitis, which is a frequent concomitant of the tonsillar involvement. The nasal mucosa is first cocaineized, and the capsicum is then applied with a cotton-covered applicator.—Med. Record, December 23, 1905.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Editors, St. Louis.

CLEFT PALATE AND HARE-LIP. By W. Arbuthnot Lane, M.S., F.R.C.S., Surgeon to Guy's Hospital and Senior Surgeon to the Hospital for Sick Children. Great Armond St., London: The Medical Publishing Co., Limited.

In the above volume the author embodies his resumé of years of experience in the treatment of hare-lip and cleft palate. The text is clearly written and the type used appeals very gratefully to tired eyes, especially if stricken with refractory errors. The author illustrates by photographic prints the various deformed temporomaxillary joints and bites that are present in cleft palate. The operative treatment is explained and many useful points are brought out in this connection. Much stress is placed on the size of the tongue and its future accommodation in the above treatment. For completeness and lucidness of the subject of hare-lip and cleft palate this volume merits commendation.

ANNOUNCEMENT.—Messrs. Lea Brothers & Co. have pleasure in announcing for publication early in January, 1906, a completely new work on Dietics adapted to the use of practitioners and students of medicine, nurses and the laity. "Food in Health and Disease." By Robert F. Williams, A.M., M.D., Professor of Principles and Practice of Medicine in the Medical College of Virginia, Richmond. The volume will be a convenient 12mo of about 350 pages. Its price has not yet been fixed, but it will probably be about \$2.00, net, delivered to any address. It is divided for convenience, into two parts: Part I dealing with Food in Health, and Part II with Food in Disease. In Part I the needs of the body for different kinds of foods and the manner in which they are utilized are explained. The principles of cooking foods and detailed descriptions of the different articles of food in common use are given, with chapters on the proper nutriment of infants, children, adults and the aged. Part II deals with the variations from the normal diet in health; necessitated by the more common diseases, and includes a chapter on general methods to be observed in feeding the sick, as well as the special directions for nourishment in diseases of different kinds. There exists today a need for a small practical books on foods and how they should be used, which will give the facts, as known today, in a brief and clear manner, with the fewest possible technical terms. The importance of a work of this kind, which is simple enough for a child to read and yet absolutely trustworthy and based upon the scientific achievements of accepted leading authorities, is obvious.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

One Day Pneumonias.—Bechtold (Muench. Med. Wochenschrift, No. 44, 1905) briefly reviews the literature of ephemeral pneumonia, epitomizing the history and diagnostic data of ten such cases occurring among a total of 1057 cases of croupous pneumonia treated in the Würzburger medical clinic during the years of 1887-1905. The symptoms were those ordinarily common to an acute infectious disease; an initial chill followed by high fever, headache, vomiting and general lassitude. In all the cases the temperature ended by a more or less typical crisis, usually associated with profuse sweating. Pain in the side was present in eight of the ten cases. The objective signs were inconstant. Palpation offered no diagnostic information in a single instance. The percussion note varied from normal to a slight diminution in the volume and duration, sometimes with an associated tympany, and in some instances to a distinct dullness. In two cases a presumptive diagnosis of croupous pneumonia was made on the general symptoms, the correctness of the diagnosis being verified by the subsequent appearance of bronchophony and changes in the respiratory murmur (roughened breathing, crepitation, etc.). In two other patients the percussion note remained normal until twenty-four hours after the initial chill. The auscultatory findings are even more variable than those of percussion. Bronchial breathing was present in two cases. In some instances the only evidence of a pulmonary disturbance was diminished or harsh vesicular breathing, or rales, sparing in number, limited to localized areas. Pleuritic friction appeared later in the course of the disease in two cases, signifying an extension of the pneumonia process to the surface of the lung. The friction sound in one of these cases persisted for some time. Bronchophony apparently seemed to be the most constant auscultatory phenomena, being present in four cases. The sputum lacked all characteristics, save in a single instance, where it was rusty brown, while another case presented a bloody tinged expectoration. In the remaining cases it was either mucous, muco-purulent or absent entirely. It is difficult to determine whether the morbid process in these cases passes through the different pathologic stages or remains stationary, as such cases rarely come to autopsy. While

Bechtold is of Leube's opinion, who holds that the abortive factor depends on an energetic reaction of the economy in producing an excessive formation of antitoxine, his observations also prove that the degree of attenuation of the virus is another prime factor.

The Accumulative Effects of Digitalis and Its Prevention.—Casares' (Rev. de Med. y. Ar. Pract., July 28, 1905) experience with digitalis coincides with that of Eichhorst and Hoffmann who claim the universal fear of accumulative effects of digitalis is unwarranted and very much exaggerated. The author says there is little danger of the drug accumulating so long as there is free diuresis. He advocates the administration of digitalis in combination with a diuretic, preferably diuretin. He reports a case where 0.1 gm. of the powdered digitalis leaves had been administered three times a day for three consecutive weeks without any ill effects whatsoever.

A Case of Extreme Bradycardia.—Frey (Muench. Med. Wochenschrift, No. 41, 1905) reports in detail an instance of this kind in a man, 56 years old, with a history of syphilis. Remarkable about the case was that for fifty hours before death the heart contractions registered on the average thirteen beats per minute with no circulatory disturbance in the internal organs or extremities, and only in the last eight hours did a disturbance in the cerebral circulation evidence itself, which presumably was the direct cause of death. Although no autopsy was made, the presumption is that the condition was a progressive degeneration of the heart muscle, on a syphilitic basis, with a sudden exacerbation.

Blood Investigations in Leukopenic Splenomegaly.—L. d'Amato (Zeitschrift f. klin. Medizin, Bd. LII, 1905) made a hematologic study in a number of diseases with splenic enlargement as the predominating feature. In two cases of so-called Banti's disease, two cases of chronic malaria and a case of hepatosplenic syphilis he noted a decrease in the number of leucocytes. In only one of these the leucocytic formula approached the normal, while in the remaining four there was a decrease, in the polymorphonuclear variety. There was a slight diminution in the lymphocytes in all five cases, and in two cases a small number of myelocytes were present. The leucocytic formula, for some unknown reason may vary in the same individual. Doubtless the etiologic factor in the production of splenomegaly has some influence on the leucocytic formula. Digestion influenced a slight increase in the number of leucocytes in four cases, while in one it de-

creased the number with changes in the leucocytic formula. Irritation, as blistering, hemorrhage and suppuration only moderately increased the number of polymorphonuclear cells. Splenic faradization increased the lymphocytes, probably by causing the organ to contract and forcing them into the circulation. The blood serum of these patients possessed but slight agglutinating power, but contained no hemolytic or leucolytic properties. d'Amato's investigations warrants him in concluding that the cause of splenomegalic leukopenia lies in a disturbance of the leukopoietic organs, especially the spleen and bone marrow. That the bone marrow undergoes myeloid transformation in a large number of cases is evidenced by the appearance of melocytes. No plausible reason can he give why there should be a diminution in the leucocytes or the sluggish reaction of the organism to substances which ordinarily promote an increase in the number of white blood corpuscles.

Tuberculosis of the Appendix.—Sitsen (Weekbl. voor. Genesch., No. 19, 1905) holds that a tubercular affection of the appendix is a rare occurrence, and according to postmortem statistics is always associated with tuberculosis of other organs (lungs, intestines). In his opinion the appendix is never the primary seat of the trouble, and says that the reported cases of amputation of a tuberculous appendix with an absence of clinical manifestations of a tuberculosis elsewhere fails to prove that the appendix was primarily diseased.

A Case of Hysterical Singultus.—Makelarie (Spitaul, No. 19, 1905) reports a unique case of hysterical hiccup in a girl 16 years of age resulting from fright. The attacks appeared daily, usually between the hours of four and six in the afternoon, numbering about 100 contractions of the diaphragm during each attack with absolutely no response to the ordinary medicaments. The therapy consisted in suggesting that the attacks will gradually diminish from day to day with the result that in six weeks the patient completely recovered. Later, a transitory exacerbation occurred from a psychic emotional effect.

Remarks on the Etiology of Tetany.—Chvostek (Wiener klin. Wochenschrift, No. 38, 1905) discusses the theoretical problems of tetany, and concludes that it can neither be regarded as a diseased state of the central nervous system, nor one of systemic poisoning. Animal experimentation, with the associated clinical evidence, warrants

him in considering tetany as a distinct clinical entity having its origin in a disturbed functionation of the parathyroid glands. This epithelial impairment may be either congenital or acquired, permanent or transitory. It is probable that the causative factors of endemic and epidemic tetany are analogous to those of endemic struma. Among the different exciting agents which also produce the specific tetany reaction in individuals with this constitutional anomaly, are gastric dilation, pregnancy, etc.

Acute Dilation of the Stomach.—Neck (*Centralblatt f. d. Grenzgebiete der Med. und Chir.*, Nos. 14-17, 1905) critically reviews the literature on acute gastric dilation, analyzing the 64 recorded cases, among which are 44 with autopsy findings. In the majority of cases the organ extended to the pubic bone, and in some instances to the floor of the pelvis. The onset was usually sudden without any previous evidence of a stomach disturbance. In 28 of these cases the distention occurred after chloroform anesthesia. It is possible that in 17 of this number the stomach might have been injured during the operation (laparotomy), but it is more than probable the chloroform injuriously affected the walls of the stomach, as in the remaining 11 cases the possibility of having injured the stomach at the operation is out of the question, the operations having been on the extremities, as knee, elbow, foot and hip. The author cites the following case to illustrate a probable idiosyncrasy of the stomach against certain drugs, possibly acting as exciting factor of the distention: A man, who on several occasions had undergone chloroform anesthesia without any after effects suddenly developed an acute gastric dilation two hours after the taking of a single dose of 0.1 gm. of veronal. In other cases the distention followed indiscretions in food or drink—in one case four bottles of champagne, and in another two bottles of lemonade. Cases of acute gastric enlargement have also been observed following abdominal contusion or other injury. The symptoms are quite deceptive. Pain may be acute at various points; vomiting generally occurs, but it may be absent or cease abruptly. Sometimes the symptoms suggest the action of toxins. The temperature remained normal in all but two cases. As a rule it is difficult to differentiate this condition from acute intestinal obstruction and peritonitis. Recovery occurred in only 17 out of the 64 cases. Concerning the treatment, the use of the stomach tube three times daily has proven most efficient, but must be continued until the stomach has returned to its normal size and the proper functionation

of the organ restored. Neck recommends elevating the pelvis when siphoning the stomach, as this procedure facilitates evacuating the organ. The distended stomach sometimes interferes with the function of the bowel. This can be obviated by the patient lying face downwards or changing to the knee chest position every two hours, and remaining in this posture fifteen minutes each time. Surgical interference is a last resort. Gastroenterostomy might be tried, but in the four cases thus treated, it was too late to benefit the patient.

SURGERY.

JOHN McHALE DEAN, M. D.

Local Effects of Peritoneal Drainage.—Yates, in *Surgery, Gynecology and Obstetrics*, publishes the results of peritoneal drainage after a series of experiments on the dog, and later clinically on patients. While the results were obtained on healthy peritoneal cavities, yet the results would not materially differ in diseased conditions. His conclusions are best expressed in his own words, as follows: "Drainage of the general peritoneal cavity is physically and physiologically impossible. The relative encapsulation of the drain is immediate. The absolute encapsulation occurs early (less than six hours in dogs), and can be retarded, but not prevented. The serous external discharge is an exudate due to the irritation of contiguous peritoneum by the drain. There is a similar inward current from the potential into the general cavity. This external exudate diminishes remarkably with the formation of encapsulating adhesions. These adhesions, under approximately normal conditions, form about any foreign body. Their extent and density depend on the degree and the duration of the irritation of this body. Primarily fibrinous, these adhesions become organized in a few days (three days in dogs). If the irritation persists, they become progressively more mature fibrous tissue. After irritation ceases, their disappearance depends principally upon a mechanical factor—the ability of the involved surfaces to pull themselves or to be pulled loose. Drains should be the least irritating, and should be gradually and finally removed as soon as possible. Irrigation through drains is futile to prevent adhesions, and dangerous. After a drain is inserted, all intra-abdominal movements should be reduced to a minimum. As soon as the drain is removed, intra-abdominal activity should be stimulated, to aid in the disappearance of the remaining adhesions. Peritoni-

tis, if not too severe, possibly aids in the rapidity of the encapsulation of the drain. A drain in the presence of infection is deleterious to peritoneal resistance, and should only be introduced to exclude more malign influences. Postural methods, unless destined to facilitate encapsulation, are both futile and harmful, as far as drainage is concerned. Peritoneal drainage must be local, and unless there is something to be gained by rendering an area extraperitoneal, or by making from such an area a safe path of least resistance leading outside the body, there is, aside from hemostasis, no justification for its use."

The Injection of Air into the Circulatory System of Animals.—In the *Journal of Surgery, Gynecology and Obstetrics*, Ezra Read Larned gives the results of seven experiments on dogs by injection of air in the circulation. It has been the general impression that if air should enter a vein when given a salt solution intravenous injection, the danger of death by air emboli was a thing to be anticipated. The injection of air in hypodermic medication is a very frequent daily occurrence, and yet no case of death is shown to have ever resulted. Pirogoff, Laborde and Muron found that when 200 grains of air was injected in jugular vein of a horse death resulted. Hare claims that the small air emboli are more to be dreaded than the large. The author found after injecting air into the circulation of animals merely a transitory dyspnea resulted, due to pulmonary emboli. Senn's conclusions from similar experiments are as follows:

1. A small amount of air in the right side of the heart in a healthy animal gives rise only to temporary symptoms, referable to the heart's action and the pulmonary circulation.
2. When air has been injected into the right side in such quantities as not to arrest the contractions of the heart itself, it is forced through the pulmonary capillaries into the left side of the heart by the contractions of the right ventricle.
3. The danger attending the insufflation of air into veins is proportionate to the amount of air introduced, as well as to the capacity of the right ventricle to resist intracardiac pressure.
4. When a fatal dose of air has been introduced into the circulation, death takes place almost instantaneously from arrest of the heart's action, or later from suffocation.
5. Spontaneous ingress of air into a wounded healthy jugular vein never occurred in these experiments, and must be considered almost a physical impossibility, as the resilient walls of the wounded vein collapse readily when exposed to atmospheric pressure.

When we consider some abdominal and cervical operations and realize the amount of

air that must necessarily enter the circulation at the time we can not conclude otherwise that death from air emboli is uncommon. In the mere sewing up of wounds we always enclose a certain amount of air and never with ill effects. Still that death may ensue from air emboli we can not doubt, but the experiments indicate it must enter rapidly and in very large quantities. How it disappears after entering the circulation is a point not well explained. The air molecule is absorbed after disintegrating into its component parts of oxygen and nitrogen.

Cartilage Plates from the Scapula of the Calf for Liver and Spleen Suture.—Stamm, in *Surgery, Gynecology and Obstetric Journal*, comments on the article of Payr and Martin in *Archiv fuer klin. Chirurgie*, in which the use of cartilage plates from the scapula of a calf are used for suture material in liver and splenic injuries. Anyone who has had to deal with these injuries can appreciate this suggestion. In experiments on dogs the cartilage plates were fully absorbed and no depression found at the site of suture. The cartilage plate is easily sterilized and its application does not entail much difficulty. The plates are fastened with mattress No. 2 dry catgut suture. A straight or curved needle is used.

Antiseptic Action of Bromine.—A solution of bromine two drachms, bromide of potash two drachms, and one pint of water, mixed and kept in glass stoppered bottle, has been used by Stroud in the treatment of infected wounds as an antiseptic. The results obtained by Stroud justify the imitation by other surgeons.

Action of Roentgen Rays on the Blood.—A very instructive article in the *American Medicine*, Morris explains after much clinical work the effects of the rays on the blood as follows:

1. The Roentgen rays cause a marked diminution in the absolute number of leucocytes in the peripheral circulation.
2. Preceding the leukopenia, there may be a moderate rise in the number of leucocytes from eight to twelve hours after the exposure, the increase being due largely to the greater number of polynuclear cells in the circulation (observed only in the rabbit); the same condition may be found just at the end of the exposure, subsiding rapidly.
3. The lymphocytes are especially susceptible to the action of the rays; they are affected first and most intensely.
4. Alterations in the histologic characters of the lymphocytes and polynuclear amphophiles may be found in the rabbit, similar to those described in the lymphoid tissue and bone marrow.
5. Hard tubes

produce the most marked changes in the leucocytes. 6. No noteworthy numeric or histologic alteration takes place in the red blood cells within the first few hours following exposure; the percentage of hemoglobin is not essentially within the same time.

PATHOLOGY AND BACTERIOLOGY.

R. B. H. GRADWOHL, M. D.

Aneurism of the Right Sinus Valsalvae of the Aorta and its Relationship to the Upper Ventricular Septum.—Karl Hart (Virchow's Archiv, Bd. 182, Heft. 2; 1905) states that aneurism of the sinus valsalvae is not commonly spoken of in the standard works on pathologic anatomy. Orth speaks of its rarity. Heyman in his Dissertation of 1874 collected cases. English writers, Redi, Sibson, Peacock, have made most of the observations on the subject. They call aneurism of the sinus valsalvae "those cases which while not located directly in the sinus are seen at point behind the aortic valves, just on the edge of the sinus valsalvae, aneurisma which grow in such a manner as to obliterate the form of both sinuses." In this connection, a finding made by Rokitsansky (Wiener med. Jahrbuecher, 1867, Heft III) is interesting, i.e., he reports an aneurism at the common insertion of the two aortic valves, that the sinus was separated from the valve attachment. Sibson and Peacock made similar observations. On account of the rarity of this lesion, it has been impossible to determine the exact relationship an aneurism of the sinus would bear to the right and left ventricular cavities, to the pulmonary artery, and to what extent a lesion of this kind would contribute to aortic insufficiency, and finally to rupture into the pulmonary blood vessels, into the pericardial sac or right heart. The right sinus valsalvae is most frequently affected of the three. Sibson accounts for this on the basis that the arterial wall is thinnest at this point (Med. Anatomy, London, Fasc. V). This can be explained from an embryological standpoint by the observations of His on the anatomic structure and the observations of Krzywicki on the pathologic changes induced at this point, to wit, the right sinus valsalvae lies over and anterior to the pars membranacea of the ventricular septum. Its wall is developed according to His, from the septum inferius aortae growing out from the right ventricle, which accounts for the fact that the right sinus contains the elements of the muscle of the right ventricular wall on the one side and on the other side, it is traceable directly to the mus-

cular tissues of the ventricular septum. The walls of the sinus valsalvae (right) consists of the elastic tissue of the aorta, the intermediary connective tissue, and partly the muscular tissue of the right ventricle. Naturally, the wall is thinner than the walls of the other two sinuses, and, according to Krzywicki and Kraus, constitute a locus minoris resistentiae. Several reports of cases at autopsy are given in this paper. One of these cases showed an aneurism of the right sinus valsalvae perforating into the left ventricle of the heart. There was an insufficiency of the aortic valves. The aneurism in this case was directed backwards, which accounted for its perforating into the left ventricle of the heart. A communication had been established between the aorta and the ventricular cavity, just as if it were an aneurisma dissecans. As causes of aneurism of the right sinus valsalvae, Krzywicki gives the following: (1) atheromatous (aneurisma spurium); (2) pressure on a locus minoris resistentiae (aneurisma verum); (3) lues.

Phlebitis Migrans (Non-syphilitica).—Gottfried Schwartz (Virchow's Archiv, Bd. 182, Heft 2, 1905) reports two interesting cases of phlebitis migrans which presented clinical symptoms of this disease, which were verified at the obduction in each case. The first case was a woman of forty years with well marked pulmonary tuberculosis. She had no specific history. She entered the hospital (Vienna) in March, 1903, and in May presented a painful swelling in the left sulcus cubitalis ulnaris. A few days later a palpable and visible strand-like swelling was seen extending from the sulcus bicipitalis med. to the axilla. The skin over it was slightly reddened. The arm seemed warmer than the right. In June the right arm became similarly affected. The sensory symptoms finally disappeared. The patient died of cachexia on July 6, and obduction showed chronic tuberculosis of the lungs. The superficial and brachial veins of both arms were excised. The second case, a man of 33 years, presented himself on April 24, 1903, showing lung tuberculosis with tubercle bacilli in sputum. No history of any venereal disease was elicited. On June 23 he complained of pain in the sulcus cubitalis ulnaris and in the sulcus bicipitalis medialis up to the middle of the left arm. At these places could be seen an edema and diffuse reddening of the skin; pressure showed tender cords along these sites. Immediately over the vena basilica mediana down on to the forearm, for a space of 7 mm. diameter could be seen a distinct, painful swelling. The pain disappeared in these places after a day or two, leaving the tender cord-like swellings behind.

But the painful areas extended distal-wards to the vena cephalica, and by the 2d of July had reached the middle of the forearm. It could be definitely determined that the vessels affected were not obliterated. Blood continued to pass through them. On the 4th of July, an area 1 cm. by 3 mm. was seen over the left vena mediana antibrachialis. Another node was seen on the right arm in the sulcus cubitalis ulnaris. The forearm was similarly affected afterwards, the first nodes losing their painfulness. On the 27th of July, nothing remained but the thickened vessels. Death occurred on the 31st of July. Autopsy showed chronic tuberculosis of both lungs, atrophy of the muscles of the right upper extremity, acute hemorrhagic nephritis, skin covering this part pale. Vena cephalica thickened. The intima showed no visible changes. The veins of the right arm were excised, as in case 1, laid open and hardened in 95% alcohol, imbedded in celloidin and cut into sections. These sections showed that the intima was not affected and that the process was an inflammatory one, affecting the media and the adventitia. There were numerous round cells and lymph cells in these two parts of the blood vessel wall. The cases were apparently free from syphilis. The writer explained the phlebitis on the ground that he had to deal with a chronic disease (tuberculosis of the lungs), that the patients were bed-ridden for some time, that they lay in bed with their arms under their head, thus making an undue pressure upon these arm veins; that there was a mixed infection, pus and tubercle organisms; that toxins of these two sources were floating in the blood stream and that with the pressure above described marking in the veins a locus minoris resistentiae, phlebitis began and ran from one vein to the other. In short he calls attention to the difference between this kind of phlebitis and the syphilitic form which was described by Neisser; in the syphilitic patient, phlebitis occurs in strong, healthy appearing persons, while in the non-luetic kind the patient was weak and bed-ridden. The syphilitic phlebitis yields readily to anti-syphilitic treatment only, while the cases just described seemed to do well under simple local treatment of compresses of aluminum acetate. In the syphilitic phlebitis, the veins histologically showed "islands of infiltration," while in the non-syphilitic variety there is a uniform infiltration. In the syphilitic phlebitis, the intima showed hemorrhagic areas, which was not true of these cases. In conclusion, the writer believes that there should be a distinction made clinically and histologically between the specific and the non-specific phlebitis migrans.

OBSTETRICS AND GYNECOLOGY

W. H. VOGT, M. D.

Origin of Oblique and Transverse Positions.

—(Fritz Kermauner, *Centralblatt fuer Gynaekologie*, No. 34.)—An oblique position was observed by the author in a 19-year-old primipara. The pelvis was somewhat generally contracted, and the head lay on the left ileum. The patient was placed on her left side during labor in the hopes of correcting the position, but without any effect. An internal examination was then made, and it was found that the entire pelvis was filled with a fairly tense cystic tumor about the size of a child's head. The membranes were unruptured and the os was dilated to a degree sufficient to allow two fingers to pass. This tumor was immediately suspected as being the filled bladder. Upon catheterization 900 cc. of urine was drawn, whereupon the tumor immediately disappeared and the head entered the pelvic inlet. He mentions the fact that transverse positions in primipara with a full term child are rare and usually the causes of the same are obstructions preventing the presenting part from entering the pelvis as tumors, contracted pelves and in very rare cases placenta praevia. The fact that the bladder remained in the pelvis after being so tensely filled with urine makes this case interesting, for we know, although the bladder is a pelvic organ it rises out of the pelvis when greatly filled. Strange, too, is the fact that on the second day of the puerperium the bladder at one time contained 500 cc. of urine, and still it was not to be felt above the pelvic inlet.

Operative Treatment of Retrodisplacements.

—(Channing Barret, *Surgery, Gynecology and Obstetrics*, Nov., 1905).—The following propositions are made: (1) That retrodeviations of the uterus are frequent; (2) that they are pathological per se; (3) that they tend to create further pathology; (4) that because of the symptoms which they produce, and the further pathology which they create, they are with few exceptions, deserving of treatment. This treatment should be either operative or non-operative. Cases without intra-abdominal complications, with a fair pelvic floor and with only moderate pathology in the uterus, may be given the non-operative treatment if the conditions are such that the patient can remain under observation and treatment for some months. The best results are obtained in this class of cases shortly after delivery. All of the rest of the cases come under the head of operative cases. The requirements of any operation should be: (1) The operation must have the slightest mor-

tality; (2) the incision must allow the correction of complications; (3) the operation must create the least possible pathology; (4) in a child-bearing woman it must allow of no interference with future pregnancy; (5) it must assure us of a permanency of results, with or without future pregnancy — must stand Goldspohn's "double test of pregnancy;" (6) it must have the least possible morbidity. The author thinks well of the Alexander-Adams operation where no complications exist. But in order to find an operation that will meet with all the above requirements the author has devised the one described by him, and finds it extremely satisfactory. His operation consists in opening the abdomen by a median incision of $1\frac{1}{2}$ to 2 inches in length; intra-abdominal complications are then dealt with and the round ligaments are then picked up and a control ligature is thrown around each about $2\frac{1}{2}$ inches from the angle of the uterus. The edge of the aponeurosis over the rectus muscle is caught near the lower angle of the wound, and the author's curved ligature forceps are carried between the aponeurosis and the rectus muscle outward to the internal ring, where the forceps is guided into the abdomen, the control ligature is now grasped by the forceps, and along with it is a loop of round ligament, and the same is withdrawn. Each loop of round ligament while being held by the control ligature, is sewed to the under side of the aponeurosis with catgut, about one inch from the median line, and if the loops should be long enough they are sutured together over the recti muscles. He terms the operation intramural transplantation of the round ligaments. He believes that anything that can be said in favor of the Alexander-Adams operation as regards pregnancy can also be said of this operation.

OTOLOGY.

ALBERT F. KOETTER, M. D.

The Movement of the Ossicles and the Part They Play in Hearing.—L. Bard (*Journal of Physiology and General Pathology*) reports his observations in the study of physiology of the middle ear. First of all he differentiates distinctly between active and passive motion of the chain of ossicles, the former are caused by muscle contraction, the latter by movement of the tympanic membrane. The passive movement may be traced to three causes: 1. Driving back the membrane dependent on a considerable change of air movements. 2. Acoustic vibration of the membrane corresponding to the rhythmic periodicity of the sound waves. 3. Morphological deformation of membrane formed by

the wave motions of the air, these again dependent on the form of the tone waves, they are much slower than the others and differ with them particularly, in their variability, lack of periodicity, and the absence of oscillatory character. The first group of movements Bard ascribes to a function for the protection of the inner ear; the second group transmitting to the labyrinth the intensity, tone, pitch and location of noise; the third group is the acoustic form of the sounding body. The active movements of the chain of ossicles serve for the accommodation for tones. The first group of passive movements (*refoulement tympaniques*) plays no roll in the hearing, the second group of movements the true, acoustic vibrations take place without any participation of the articulations of the chain of ossicles. The third group was first described by the author, and he ascribes to it an important roll in the perception of acoustic forms. Regarding the accommodation the author remarks that the movements of the tensor tympani do not swing the malleus around its neck, but draws the handle toward the inside. These changes of the tension of the membrane called forth are the expression of the adaptation of the membrane to noise, respiration quiet. The contraction of the stapedius draws the neck of the stapes and with it the entire chain of ossicles, including the handle of the malleus, backward. Therefrom result differences of tension between the vertical halves of the membrane, making it possible for the membrane to adapt itself to the distance of the origin of the sound. Whilst he compares the internal muscles of the ear with the muscles of accommodation of the eye, he places the tensor with the iris muscle (adaptation for the intensity) the stapedius with ciliary muscle (accommodation for distance).

Pathological Anatomy of the Inner Ear and the Question of Primary Brain Abscess.

—(Schwabach).—Girl of fifteen received in hospital with headache, vertigo and nausea, which have been present for five weeks following a suppurative otitis media sinistra, which appeared seven weeks before. Left membrane slightly congested. Lumbar puncture reveals 40 ccm. of clear sterile fluid. Pulse continually sluggish. When author saw patient she was in a stupor, pupils irregular, deviation conjugée to the right, contraction of left elbow joint. Death occurred with the appearance of paralysis of respiration. Post-mortem.—On right under medullary substance of the frontal lobe an abscess the size of a hen's egg filled with sterile pus, capsule several millimeters in thickness. Brain sinus free. Right petrous portion of temporal

bone clear; on left tough yellowish mucus in the tympanum. Histological examination besides slight inflammatory changes on the non-perforated membrane, small quantity of free pus, considerable tumefaction of the mucous membrane of the tympanic cavity. Eruption of pus, with partial destruction of the annular ligament of the stapes into the vestibule, furthermore, on different parts of the labyrinth capsule in the cavity of the cochlea, with simultaneous appearance of connective tissue and new bone formation in the spongiosa of the temporal bone. Slight changes in the mucous membrane of the mastoid cells. Extensive suppuration and connective tissue formation in the labyrinth, small cell infiltration of the vestibule, suppurative hemorrhagic exudate in the semi-circular canal both in the endo- and peri-lymphatic spaces. Inflammatory infiltration of the cochlear nerve, also traces in the vestibular nerve. Facial nerve intact. Of importance is the incongruity between the comparatively slight changes in the middle ear and the extensive destruction in the temporal bone as well as in the cochlea. The brain abscess although it existed, in an otitis media suppurative sinistra, on the right side can be traced back to this suppuration, an abscess membrane can occur in abscesses whose existence can be dated back only a few months.

The Exudative and Plastic Processes in the Middle Ear.—(Goerke, *Archiv fuer Ohrenheilkunde*).—The interesting and painstaking examinations of the author, embracing the post-mortem sections of hundreds of cases and the histological description of eighty temporal bones refer to the pathological anatomy of acute otitis media without perforation of the membrane. They prove first of all that the exudates found so often in the middle ear cavity in post mortems are not transudates, but in fact inflammatory exudates. Whereas, the exudate was found in the tubes in small quantities, the tympanic cavity was usually entirely filled. Parts most often involved are the windows, the posterior pouch of the membrane, the floor of the tympanic cavity, the smaller and smallest spaces between the ossicles and their ligaments and Shrapnell's membrane. In the antrum and mastoid cells the exudate enters the dependent parts if it does not entirely fill them. The exudate undergoes remarkable changes until it becomes connective tissue. While now the epithelium grows down to the vessel carrying bridges which spread out between the mucous membrane and the exposed exudate there arise the so-called cavity proliferations of Preysing, a condition which was perhaps erroneously connected with the involution

of myxomatous tissue. In the bone there were observed in one case extensive softening, and in four other cases in a slighter degree. When the resorption foci are nearly all found in the mastoid process, Goerke thinks the tympanic cavity which is rich in connective tissue submucosa offers great resistance to the extension of the inflammatory process. Author has found the middle ear exudate almost exclusively in weak individuals, those suffering from long continued disease, which eventually causes death; he therefore thinks that the origin of the otitis (otitis of the cachectic) is favored by the lowered vitality and diminished resistance of the tissues with also the insufficiency of the normal protection. With this he divests, as compared to Preysing and others, the otitis media of the infant and many other middle ear inflammations considered specific, in so far as they belong to the above mentioned group, completely of their specific character.

The Relation of Diseases of the Circulatory System to Diseases of the Ear.—(C. Stein, *Zeitschrift fuer Ohrenheilkunde*).—Of the diseases of the circulatory system, arteriosclerosis, mitral stenosis and myodegenerative cordis are most frequently associated with disease of the ear, and in the majority of the cases, arteriosclerosis. The symptoms on the part of the ear were tinnitus, deafness and other subjective symptoms of a non-inflammatory nature, most often as a result of disease of the sound perceiving apparatus. Author thinks there is a direct connection between arteriosclerosis and diseases of the sound perceiving mechanism, which is of especial value to the clinician, in that the ear symptoms in conjunction with increased blood pressure, can be utilized as early symptoms of arteriosclerosis. The above mentioned affections of the circulatory apparatus influence the middle ear processes in that they favor the spread of the process to the labyrinth. The cause for the detrimental involvement of the ear is due to the anemia brought about by disease of the blood vessels. Therefore all local therapy should be discarded, and in its place, the treatment of the heart, respectively the blood vessel affection is advised.

PEDIATRICS.

A. LEVY, M. D.

"Gone Off His Legs."—(G. A. Sutherland, *Brit. Jour. of Children's Diseases*, March, 1905).—The occurrence of weakness of the lower extremities in a child previously able to stand, walk and run normally is a

peculiarly striking symptom. The most frequent cause of this symptom is probably rachitis depending upon too abundant carbohydrate diet, where the soft bones and relaxed muscles are not in condition to bear the body weight. Return to rational feeding by diminishing the carbohydrates and substituting milk, butter, cream and cod liver oil results in rapid recovery, especially if at the same time fresh air and sunshine treatment, salt baths, massage of the trunk and extremities are carried out. Another frequent cause of the giving way of the lower extremities in children in diphtheria paralysis. If the history does not tell of a recent diphtheria or throat trouble the diagnosis may be safely taken for granted if there is an existing nasal voice or strabismus or regurgitation of fluids through the nose. In cases of infantile paralysis (poliomyelitis anterior acuta) the development of paralysis after an acute febrile attack accompanied by convulsions is characteristic. Upon examination there is found to be paralysis and after a time marked atrophy of certain muscles or muscle groups. The possibility of hysteric paralysis should not be forgotten, even in very young children; sometimes an attack can be the starting point of functional disturbances. Among those diseases which are rarer yet not to be lost sight of are, brain affections, e.g., cortical sclerosis or cerebellar tumors, cord affection, e.g., Friedreich's ataxia, compression from vertebral caries, myopathies, e.g., paralysis pseudohypertrophica, arthritic diseases, bone diseases, e.g., osteomyelitis. All of these diseases are accompanied by destructive changes which may be recognized by careful examination.

A New Sign of Heredity Syphilis.—(W. P. Jukowski, *Med. Obs.* lxiii, No. 7; quoted *Archiv of Pediatrics*.)—The author begins with a short critical survey of the usual symptomatic aids to the diagnosis of hereditary syphilis and pronounces most of these signs and symptoms to be inconstant and unreliable. He then describes a new sign which consists in a peculiar dryness and mobility of the epidermis. In the new-born presenting slight atrophy we find this phenomenon only in certain regions, as on the chest, the abdomen, the neck, sometimes only on palms and soles. In cases of syphilis, however, the entire skin is loose and covers the underlying cuticle like a thin skirt. When the child moves, the loose epidermis is thrown into folds and presents a curious wavy surface. The entire picture is very characteristic and cannot be mistaken for anything else. So much can be observed immediately after birth. In a few days the appearance of the skin

slowly changes, owing to deep cracks which now come to view and to the accompanying desquamation. The fissures go through the entire skin, and the bleeding stripes and spots give the surface a variegated aspect. There is no icterus. In severe cases the infants were completely aphonic and died within six days. No other known symptoms of syphilis were present in cases studied by the author. This new diagnostic feature, if it can be confirmed will evidently acquire great importance, owing to its very early presence. The author also goes into a discussion of the histological bearing of his symptom.

Whooping Cough; Its Prevention and Treatment.—(Louis C. Ager, *Brooklyn Med. Jour.* Nov., 1905) opens his rather comprehensive paper with the statistical statement that whooping cough causes more deaths than typhoid fever. The danger lies in the complications, especially convulsions, bronchitis and pneumonia. In a historical review of the disease he mentions this fact: In England and Wales from 1881 to 1890 the mean annual death rate for children under five years was 12.97 for respiratory diseases, 4.35 for diarrheal diseases, 3.37 for pertussis, 3.13 for measles and 1.67 for scarlet fever. Etiologically the disease appears to be due (not fully established) to a short bacillus resembling the influenza bacillus, is transmitted through expectorated mucus of infected individuals and may be carried by third persons or infected clothing and utensils. The diagnosis is easy when the characteristic paroxysmal cough occurs accompanied by whoop, but for purposes of prophylaxis isolation, etc., the author seeks early symptoms. Among these, a leucocytosis, 10,000 to 20,000, the increase being principally in small and large lymphocytes, paroxysmal croupy cough, especially at night without auscultatory signs of bronchitis; adenoids must of course be excluded. Much value is placed by some on the occurrence of ulcer on the frenum. The urine is said to be present certain characteristic changes, being pale and clear of high sp. gr. 1022 to 1035, the change being due to increased uric acid excretion. In considering the therapy of whooping cough he mentions the waning popularity of belladonna and antipyrine, and later of antitussin. He condemns the "do nothing" plan, and recommends the use of formalin inhalations, being convinced that the length and severity of attacks are much diminished (to three or four weeks). The formalin acts as a disinfectant and expectorant. The formaldehyde may be generated from a small lamp or an aqueous solution may be sprinkled about the room,

upon the clothing and bed of the child. In addition to this he gives a combination of apomorphine muriate and codeine phosphates. Apomorphine 1-30 to 1-16 gr. every half hour for several doses with longer intervals between paroxysms. Digitalis should be given to steady the heart when it is needed. He speaks favorably of the use of elastic bands about the middle of the trunk. He personally used unbleached muslin fastened with safety pins like a post partum binder. It is of value to pull down the jaw during a paroxysm, and to try to train the children to cough with the lungs full of air.

Streptococci and Antistreptococcic Serum.—(Herbert D. Pease, *Med. Rev. of Rev.*, September, 1905).—In that part of this article treating of scarlet fever we find that the best results obtained by this serum are those reported by Moser and a group of Austrian investigators using the Moser-Paltauf serum in scarlet fever. This serum is prepared by immunizing the horse with cultures of streptococci obtained from the heart's blood of fatal cases of scarlet fever. The dose recommended is 200 cubic centimeters and should be given early. Escherich first used Marmorek's serum with unsatisfactory results. He reported 142 cases treated with Moser's serum. Effect is seen within four to twelve hours. All symptoms are improved without shock or collapse. Temperature falls, pulse and respiration diminish, and nervous symptoms subside. The serum should be given before the height of the disease is reached. The sequelae, otitis, endocarditis, nephritis are not prevented nor influenced, unless the serum is given early in the disease. According to Escherich the death rate in St. Anna Kinderspital was reduced from over 12% to 6% since the use of the Moser serum.

OPHTHALMOLOGY.

WALDEMAR FISCHER, M. D.

Accident with Adrenalin.—David de Beck, Seattle, Washington (*Annals of Ophthalmology*, July, 1905), reports that a man aet. 37 with a plastic syphilitic iritis, begged that something be done to remove the congestion from the eye, which he feared would prove injurious to his business interests. Several instillations of adrenalin chlorides P. D. & Co., were made. The patient returned the following day complaining that the eye pained him severely about an hour after the adrenalin had been used. An examination revealed a hyphema which filled one-half of the anterior chamber, and was accompanied by the usual impaired vision. The

blood in the anterior chamber was resorbed in the course of four days, the vision being entirely regained. The author reports the cases, as he wishes to direct the observation of others to this rather unexpected result from the application of adrenalin.

Radium in Trachoma.—(J. C. Besk, Chicago, *Annals of Ophthalmology*, July, 1905.)—The results from the application of radium in iritis, irido-cyclitis and optic atrophy are not as satisfactory as Darier reports. These affections are not influenced by its radioactivity at all. There is, however, a decided improvement and a permanent cure of trachoma. The exposures are at first ten minutes daily, later for thirty minutes three times a week. Burns seldom occur, although some cases show a marked reaction to the treatment.

Inoculation of Rabbits' Eyes with Luetic Material.—(Dr. W. Schultze, Berlin, *Friedenau, Klin. Monatsbl. f. Augenheilk.*)—Very little original research was attempted in this connection as long as the dogmatic belief that syphilis is a disease of man only, was universally accepted. The interesting results obtained by other and very recent investigators in this field, led the essayist to attempt the inoculation of rabbits' irides with syphilitic material. Animals do not contract lues like man, but they can be inoculated with it, as has been demonstrated by perfecting the technique of inoculation. The author carefully inoculated the irides of 28 rabbits from primary lesions, mucus patches and gummatous organs, and lastly from one inoculated animal to another, and in every instance on the third day the injection about the focus of inoculation became intensified, the cornea and aqueous humor became cloudy. The iris became hyperemic, lost its markings, and the pupil became contracted. A thickening of the iris occurred, especially about the focus of inoculation on the fourteenth day, when the acme of the inflammation had been attained, after which all symptoms gradually subsided excepting the nodules which became circumscribed and distinct, and might be slightly visible for three months before their final disappearance. The animals suffer from constitutional symptoms, as drowsiness, ulcerations on the skin, rhagadae on their lips; some even die. The microscopic findings confirm the clinical picture. Syphilis is probably due to the cytorhyctes luis of Siegel, they may be classed under the protozoa. They are very minute, their greatest diameter being one-half to two and one-half μ , their longest flagellae measuring about 10 μ . The pathologic process is

slow, involving chiefly the vessels of the iris. The intima of the arteries becomes loosened, the interstitial increases until the third week when the iris attains its greatest thickness. The vessels have a distinct hyalin color, and the tissue about the larger vessels becomes edematous. The cytorrhcytes luis are found in the tissue juices, in the connective tissue elements of organs, in the plasma or ground substance, but never in the nucleus of cells.

EDITORIAL NOTES.

Prof. Hjort, of Christiania, died at the age of 70 years. His best known work was on the "open treatment" of ocular wounds.

Geheimrath Dr. Wm. Hess, of Mainz, died August 27th in this 75th year. He was one of the founders of the Heidelberger Ophthalmological Society and a close friend of Albrecht v. Graefe.

Hofrath Dr. Schubert, of Nürnberg, died in his 56th year. He was a pupil of Herman Cohn, and deserves great credit for his introduction of vertical writing as well as many other improvements in school hygiene.

Brettauer, of Triest, died July 11th of bronchopneumonia. A personal friend of both v. Grafe and Arlt, he cherished the traditions of the golden ophthalmological age. His costly collections of medallions, drawings and other productions of art relating to ophthalmology can be classed as an unicum.

Geheimrath Prof. Dr. Schweigger died in his 72d year after a long illness, which eventually led to a paralysis of most of his muscles. While the assistant of A. v. Graefe he published important contributions on Embolism of the central retinal artery and on albuminuric retinitis. Schweigger sojourned in the United States for a limited time, when he was recalled to Goettingen as professor from where he was transferred to the University of Berlin as Graefe's successor. His best known contributions to ophthalmology are those about squint, glaucoma, cataract operations, his test-types and his hand-perimeter. His manual on the use of the ophthalmoscope enjoyed a wide circulation, and his text-book on ophthalmology was extensively used before the advent of the master text-book of Fuchs. Schweigger's best known pupils are Horstman, Silex, Roth, Greeff and Abelsdorf.

Never incise a swelling in the course of a large artery without making sure first that it is not an aneurism.

SOCIETY PROCEEDINGS

MEDICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Stated meeting held November 6, 1905. The President, Dr. J. J. MacPhee, in the chair.

GALLSTONES.

The next patient, presented by Dr. John A. Bodine, was 72 years of age, the mother of a large family. She had suffered more or less pain in the region of her stomach all of her life, but had attributed it to indigestion, never at any time having been jaundiced. Pain became so severe that she consulted a physician a few weeks ago. A diagnosis of gallstones was made, but the speaker did not make up his mind whether or not to advise an operation because of the patient's age. Palliative measures were suggested. Later, she demanded relief at any reasonable risk. When the abdomen was opened an appalling mass of adherent omentum and intestines was encountered. The line of cleavage was quickly found and the adhesions broken up. In a bed formed by the adhesions between the colon, omentum and liver thirty-six large gallstones were found. There was no bile and not a trace of the fundus of the gall-bladder. As soon as the last stone, which was impacted in the neck of the gall-bladder, was removed, bile made its appearance. As there was no gall-bladder to suture to the wound, the margins of the adventitious cavity containing the gallstones were sutured to the abdominal wound and a tube inserted for drainage.

This case illustrates the amount of destruction that may be accomplished with no symptoms other than those attributed to a long-continued dyspepsia; and it also shows that at 72 years the age-limit of the beneficence of general surgery has not been reached.

PARALYSIS OF THE FACIAL NERVE.

Dr. Bodine also showed a patient on whom he had operated five days previously for paralysis of the facial nerve. Twenty-three years ago the woman had had facial erysipelas, which was followed by facial paralysis. At present there was ordinary atrophy and flaccidity of the cheek, the staring eye and the mouth twisted over to the well side. An attempt to cure this patient seemed justifiable, as six cases had been reported in which the dead facial nerve was attached to a nearby motor trunk and two patients had been used. The best results, however, fol-

low those cases of facial paralysis due to traumatism, as in mastoid operations.

The speaker said he had not attempted an operation for a long time that was easier, technically, than the one he performed on this patient. The facial nerve in this case was represented by a mere fibrous cord, in which, however, some axis cylinder was discovered. The spinal accessory nerve was not utilized, for if it is not cut in two and an end to end anastomosis performed, every time the patient laughs the shoulder jerks. If the nerve is divided, there is a troublesome atrophy of the shoulder muscles.

For anatomical as well as physiological reasons, the motor nerve selected was the hypoglossal. The muscles of the tongue supplied by this nerve are in closer communication anatomically and physiologically than those of the spinal accessory, although the latter nerve is much more easily found and identified.

After the incision through the skin and superficial fascia, beginning at the level of the external auditory meatus and extending downward for two inches along the anterior edge of the sternomastoid muscle, one must be careful to separate the carotid gland from the anterior edge of this muscle without injury to its capsule, otherwise the carotid secretion will flow into the wound. Retracting the carotid gland toward the edge of the sternomastoid muscle posteriorly one may readily identify the styloid process, and winding around its base is always to be found the facial nerve. It does not require five minutes to expose and identify this nerve. The transverse process of the second cervical vertebra is next identified and just anterior to this and posterior to the internal jugular vein, beneath or imbedded in the loose fascia, is the pneumogastric and hypoglossal nerves. The positive identification of the hypoglossal is made by pinching it with thumb forceps, or by electrical stimulation. Usually, however, the more superficial of the two nerves is the one in question. A slit is made in the sheath of the hypoglossal nerve, and after cutting the divided facial nerve wedge-shaped, the latter is wedged into the slit and held by two sutures through the sheath, and the wound closed without drainage. Up to the present time the result had been good, but three or four months must elapse before permanent results would be apparent.

Dr. W. B. Pritchard said that a difference of opinion exists as to how long after paralysis occurs anastomosis could be attempted with success. The consensus of opinion is that it should be done within four or five years, as within this period of time the

nerve to a certain extent is in an active condition.

The paper of the evening, entitled

A SERIES OF INTERESTING PATHOLOGIC FINDINGS.

was read by Dr. F. M. Jefferies. He said, in part:

In the study of anatomy one is impressed by the frequent departure from what is accepted as the standard. A vessel divides anomalously, an organ is misplaced, or there may be a total transposition of the viscera. We wonder at these unexpected variations more than when we encounter unusual conditions in plant life, because we feel that we can account for such alterations by some extraneous influence, the nature of which we may only surmise, or concerning which we must confess ignorance, or we may attribute them to the effects of hybridizing, or again to a natural reversion to the original type.

Throughout the entire practice of medicine one rarely encounters a disease which, so far conforms to its type in all its manifestations as to be classical. In some points it may be deficient, in others unusual phases are encountered. In animal and plant life we recognize the law that like begets like, each genus producing its kind. This law remains unbroken even to the depths of the bacteriologic world. The laboratory worker, because of the nature of his work, encounters a goodly number of phenomena, and such collections are the more valuable because in many instances several years' subsequent history is available.

The first specimen I show you is a fatty embolus of the lung. Fatty emboli occasionally are produced after fractures and after certain operations. A few years ago I was called to make examinations of certain organs to aid the prosecution in a case involving the care of an insane patient in one of the city institutions. The family of the deceased accused the hospital attendants of being responsible for the death of the patient. Two hospitals were in dispute as to the accounting for five fractured ribs discovered at autopsy. Those at the first institution at which the patient was confined declared that no ribs were broken when the patient left it; the other as strenuously asserted that he had no fractured ribs when he died, therefore the breaks occurred after death in the handling of the body. In court it was necessary to convince the jury that fatty emboli could not be produced after death.

In the same set of organs a granular ependymitis was discovered. The ependyma is a very thin and delicate membrane lining

the cerebral ventricles. Acute inflammation of this membrane in which small granular elevations are produced on the surface of the ventricles is nicely shown in the specimen.

The next specimen is adrenal tissue found in the kidney. This condition, while regarded as sarcomatous in character, is known as struma super-renal. I can only conclude that early in the embryonic state a bit of adrenal tissue, possibly only a cell, wanders away from its own and becomes enclosed in a kidney structure, where it remains dormant until some force acts to give it vitality and it forthwith begins to manifest itself by producing its kind. The specimen shown removed by Dr. Ladinski from a woman, 55 years of age. Her trouble dated from the beginning of her menopause, three years previously, so that this particular neoplasm remained dormant for fifty years or more when the physiologic processes of that period in the woman's life were sufficient to excite the foreign cell or cells to activity.

A still more striking exemplification of this wandering character of cells is shown in the next specimen, in which two nodules of apparently normal thyroid tissue are seen embedded in an otherwise normal lymph-gland. This was removed by Dr. Wyeth from the neck of a woman a few years ago.

A malignant adenoma, the structure of which is typical of pancreas, is the next on the list. This was removed from the abdomen of a child nine years of age about a year ago. There were masses of this tissue everywhere in the abdominal cavity, which was greatly distended by their bulk. The child is still alive, but the growth is continuing, and at last accounts considerable trouble was being experienced in securing action of the bowels, and no hope was entertained for the recovery of the patient.

A peculiar form of sarcoma is the next specimen. This is from an infant, and was described as a large growth in the abdominal cavity. Its structure, whilst distinctly sarcomatous, is yet arranged in bodies which are, to say the least, very suggestive of malpighian bodies. The tissue came from Dr. Rolster, of Oklahoma City, and no further history accompanied it.

Cancer of the appendix is rare. Primary cancer of the appendix is still more rare, and therefore primary cancer of the appendix in a girl fifteen years of age would hardly be expected. Yet such are the facts concerning the next specimen. The growth was situated at the tip of the appendix, and was not much larger than a grain of wheat. It was removed by Dr. Goffe five years ago. He says that the patient is still alive and in good health. The girl's family history makes

mention of cancer in other members of the family. One would presume that the prognosis in this case should be good.

Endotheliomata are fairly rare, and most of those reported are associated, in their origin at least, with endothelial membranes. An endothelioma of the jaw is here shown. It is from a man 39 years of age, and was described as a tumor of the jaw the size of a hen's egg. It was attached to the left submaxillary triangle, and was of two years standing. It was removed by Dr. Bodine, and the patient is still alive and in good health, although three years have elapsed since the operation.

Many other unique and interesting specimens were exhibited and their histories given, the last three being an epithelioma from a horse, carcinoma from a dog, and a sarcoma from a canary bird.

NEVER attempt to pack a bladder for hemorrhage without the aid of guy sutures; with them one can make absolutely sure that the gauze goes into the bladder, and not on top of it, pushing the organ away from the space of Retzius.

PROPRIETARY REMEDIES.—Many physicians are "on the fence" regarding the use of proprietary remedies. They do not know whether to use them or not. The position of the writer can be stated in a few words. Before using a remedy of any kind, I learn all I can concerning it and, if a compound, I learn what it contains, and then study its effect as I do with any remedy whatsoever. Many of our most valuable new or comparatively new agents are "proprietary remedies," and owing to the great expense attending laboratory research the majority of the new agents of the future will be proprietaries. A large number of the elegant and efficient combinations representing the better class of proprietaries are impossible to extemporaneous pharmacy, or to the average druggist. Worthy proprietaries, those that have stood the test of time and experience, are as ethical as official preparations. The trouble in their use lies in careless or thoughtless prescribing, advising a line of treatment without having clearly studied the indications. This, however is the fault of the doctor and applies to all remedies. I see no impropriety in the careful use of worthy proprietaries, but I most heartily condemn the great tendency of the "so-called" manufacturing "chemist" to foist upon the profession and public cheap imitations of standard preparations.—W.H. W. in N. C. Med. Jour.

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MEDICAL MISCELLANY

SUBSCRIBE for The Medical Fortnightly.

THE best drainage should be afforded for all punctured wounds of the palm; suppurations in this region are very disagreeable and are followed by severe consequences.

IN cases of suspected rupture of the bladder, catheterization is not always a sure test. The rent may be so large that the catheter draws away urine that has already flowed into the peritoneal cavity.

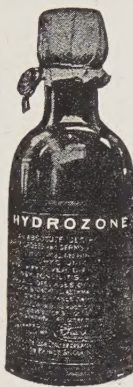
THERE must be in existence few unpublished portraits of Thackeray. One of them is to be presented in the January Century. It is from a photograph of the crayon-drawing from life by E. Goodwyn Lewis. This drawing was done for a member of the Mackworth Praed family, at the sale of whose effects it changed hands in January, 1904. Later the portrait was acquired by the Keniston Public Library.

DERMOID OVARIAN CYST SIMULATING FLOATING KIDNEY.—E. A. Isaac's patient was a woman of nineteen years, with an indefinite previous history, who was suddenly seized with abdominal pain and vomiting. On examination a freely-movable tumor was discovered much resembling the kidney, though the author made the diagnosis of ovarian cyst with twisted pedicle. On operation this opinion was shown to be correct, the pedicle being seven inches long and attached to the tissues over the sacrum.—Medical Record.

AFTER major amputations an elastic constrictor should always be left at the head of the bed, so that the nurse can immediately apply it in case of secondary hemorrhage.

THE COST OF MODERN HOSPITALS.—S. S. Goldwater analyses at length the conditions which cause the cost of the modern hospital building to be so much in excess of what was the case a generation ago. He estimates that a hospital of 1870, 450 beds with a space allowance of 6,000 cubic feet per patient could be built today at a cost of \$1,200 a bed. A modern hospital with the same space allowance would cost double, or \$2,400 a bed, while actually in a hospital recently built 11,000 cubic feet were allowed per patient, and the cost was approximately \$4,400 per bed. The author then analyses at length the various features entering into the construction of the modern hospital which contribute to raise its cost to so great a degree, such as fireproof construction, electric light and power, laundry, kitchen, refrigeration, surgical facilities, disinfecting and sterilizing plants, accommodations for the staff, nurses, and employees, laboratories, etc. He summarizes by saying that, aside from economic causes which are beyond our reach, the high prevailing cost of construction is apparently due to new methods of disease-classification and treatment, to more intense nursing, to the discovery of scientific methods of diagnosis, to an application of the principles of wards, work-rooms and living rooms, to the desire to release from the wards during part of the day convalescents to whom the atmosphere of the sick room is detrimental, and finally, to the evolution of the fireproof, and to a certain degree germ-proof, building. If we apply to all of these improvements the rigid tests of result, we shall find that the test is fairly met; but while we may grant that to build a general hospital embodying all of the features enumerated is to tread the path of wisdom, we may nevertheless question the propriety of investing all of our capital in the construction of such a plant. The author then proposes the plan of having the hospital maintain in the country a less expensive branch building for the reception of the convalescent patients, and shows that in this way a much larger number of patients can be provided for at the same expense. For example, the sum of \$1,000,000 will provide a city hospital with country annex, it will furnish accommodations for 250 patients. The conditions of operating will also be such as to render this division of the plant the most economical system of managing the hospital, and he urges universal adoption of the plan.—Med. Record.

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BOARD OF EXAMINERS.—The Civil Service Commissioners of Illinois have appointed the following Board of Examiners to conduct the examination of applicants for positions as assistant physicians in the State Hospitals for the Insane, viz, Drs. Hugh T. Patrick, Frank Billings, John B. Murphy and Harold N. Moyer, of Chicago, and Dr. Frank P. Norbury, of Jacksonville. This board will prepare the list of questions and grade the papers, the commission itself supervising the examination.

PASS CHRISTIAN, THE FAVORITE RESORT OF THE SOUTHLAND.—Physicians who have traveled extensively have pronounced the climate of Mississippi on the Gulf of Mexico, the ideal one for winter, especially for that class of patients who have a tendency to bronchial troubles, and who do not stand the rigorous winters of the north. The Mexican Gulf Hotel, at Pass Christian, is one of the famous hostleries of the South, and under the management of Mr. E. F. Carroll, has grown more popular than ever. Take a trip yourself, doctor, and you will find a climate equalled only in the south of France. Here you will find boating and fishing during our Northern midwinter, and an average temperature of 70 deg. F. The Pass is only fifty miles from New Orleans, and easily reached in two hours via the L. & N. R. R. Do not overlook the fact that not a single case of yellow fever occurred at Pass Christian during the recent epidemic, a fact that speaks volumes for the hygienic surroundings and the peculiarly healthy climate of this resort. Write to Mr. Carroll for full particulars.

VIRTUE RUNNING WILD.—The sentiment which underlies the present efforts of certain worthy medical men, to protect the profession from imposition and to make our therapy clean, reliable and trustworthy, is entirely laudable and commendable. The extent to which some of these gentlemen are permitting their enthusiasm to carry them is lamentable. The judgment passed upon many of the pharmaceutical preparations which have stood the test of time for years in the practices of thousands of successful medical men, has seemed hasty and all-advised. To one who is prejudiced in neither direction, who endeavors to look at the matter with perfect fairness, it is very questionable if it is right that a small faction of the American Medical Association should use the organ owned by all of the members to condemn or detract from the reputation of long established pharmaceutical preparations, many of which are used regularly by a large part of the membership of the association. The manufacture and sale of pharmaceutical preparations is and must be commercial in its character. It can never be strictly professional. The average preparation which has been used by medical men of intelligence for years with good results must have something in its favor, even if its manufacturers are not willing to conduct their business exactly as we may wish to dictate. I have no desire to uphold in any way the secret medical nostrum, but I question as a matter of fairness, the propriety of attacking any well-tried preparations until it is demonstrated beyond reasonable doubt that the members of the Association are opposed rather than being users of the preparation in question. Those who have been placed in positions of power—which may be used for the accomplishment of evil as well as good—should appreciate that such an office is one of trust and there should be an effort to carry out the will and wish of the majority rather than to be led by personal prejudice or petty motives.—G.T. F. in the The Chicago Clinic and Pure Water Journal.

RESPIRATORY AFFECTIONS: SYMPTOMS AND THEIR TREATMENT.—(By Justin Herold, A.M., M.D.) The past few months have afforded me, and no doubt others, opportunities to test the efficiency of the therapeutic qualities of the various remedies vaunted as certain to relieve the harassing symptoms attendant on the diseases produced by the bacillus of that nineteenth-century infant, "La Grippe." I refer to this epidemic particularly, because it had not manifested itself in such virulent form since the memorable grippe epidemic of 1889. The author of this paper, in the past few months has had occasion to employ the several preparations recommended for the relief of the distressing respiratory symptoms attendant upon "la grippe." These manifestations, from my view-point, have been characterized principally by cough and dyspnea, in other words, "dyspneic cough." Expectorant mixtures, anodyne solutions, together with hypodermic medication, produced in me a disgust; and why? Simply and undeniably for the reason that the ordinary cough mixtures contain the opium preparations in such combinations as to leave a depressing effect, which, especially in cases of the grippe of the "depressing or melancholic" type, enhances the already depressed feeling. Combinations of expectorants with stimulating ingredients had no less the same effect. Glyco-heroin, in all the cases in which I have used it, has never caused vomiting, an important point for the physician. Another important point noted was that this preparation of heroin—glyco-heroin (Smith)—never played pranks with the structures composing the vasomotor system. Now, what do we, in treating disease, want in addition to a good stomach and a stable nervous attachment? We want rapid action. That I effected through the use of glyco-heroin. You cannot produce toxic effects with this preparation, as its effects are lasting, and in most cases do not necessitate the use of the drug at very frequent intervals. Glyco-heroin allays cough, without doubt better than any remedy I have used this winter. And that without the sometimes disastrous results of other preparations of the papaver group. Respiration is stimulated, not in number, but in the depth of the inspiratory act; thus full and complete oxygenation takes place, an important adjunct to the helpful effects of drugs in general, and saving the patient that expensive tank of oxygen. Given full and complete oxygenation, all other symptoms must accordingly diminish; thus temperature and pulse-rate are reduced to a normal condition. Elimination of noxious products not being interfered with the excretion of urine is brought to the normal under the use of glyco-heroin. It is well known that diminished quantity of urine follows as a result of inflammatory diseases of the respiratory tract; thus the standard quantity of urine is enhanced by the judicious use of glyco-heroin:

I beg to submit the following cases:

Case I.—Acute Laryngitis.—George F. N., aged 14 years. Coasting, perspiration, and no overcoat, a good combination to bring on an acutely inflamed laryngeal mucous membrane. Pain on swallowing, talks in whispers, temperature 101.5 deg. F., pulse 135, respiration 23, cough, barking like dog, uncomplicated case of laryngeal inflammation. Stokes' expectorant did not relieve, seemed to increase cough. Glyco-heroin, full doses of one teaspoonful every three hours, while producing much sleepiness, reduced inflammation, cough, and pain in three days. I then combined it with squills and syrup balsam tolu, to be given every four hours until completely relieved.

Case II.—Chronic Bronchitis, Asthma and Emphysema.—Mrs. H. D., aged 44, has had asthmatic attacks, every fall and spring, for the past eleven years; not in winter, but only at the beginning and end of seasons. Iodines, senega, squills, digitalis, and cupping gave relief, but with the penalty of a return of more severe attacks. Dyspnea, cough and expectoration in this case was something frightful to witness. In this case, prompt hypodermic injection of 1-8 grain of morphia relieved somewhat, followed by the use of glyco-heroin, one teaspoonful every hour for three doses, then every four hours, and on the third day every six hours. In this case the glyco-heroin seemed to continue the effect of the morphia.